DOCUMENT RESUME

ED 270 286 RC 015 817

AUTHOR	Peterson, Roland L.; And Others
TITLE	Access to Educational Opportunity in Rural Communities: Alternative Patterns of Delivering Vocational Education in Sparsely Populated Areas. Volume 4: The Interdistrict Cooperative Center: A Centralized Center.
INSTITUTION	Minnesota Univ., St. Paul. Agricultural Experiment Station.
REPORT NO	AD-SB-2852
PUB DATE	86
NOTE	72p.; For related documents, see ED 258 733 and RC 015 815-818.
AVAILABLE FROM	Community Resources Distribution, Room 3, Coffey Hall, University of Minnesota, 1420 Eckles Avenue, St. Paul, MN 55108 ($3.50).
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	*Access to Education; Agricultural Education; Case Studies; *Centralization; Cooperative Programs; *Delivery Systems; *Educational Cooperation; Home Economics; Program Descriptions; *Rural Education; School Districts; School Organization; Secondary Education; *Vocational Education; Vocational Training Centers
IDENTIFIERS	Minnesota; Sparsity (Population)

ABSTRACT

The centralized secondary center pattern of inter-school district cooperation is examined in this third of four case studies addressing access of rural students to vocational education. The report identifies essential features of this form of cooperation, details factors facilitating/impeding the operation/maintenance of the cooperative arrangement, assesses the program's compatibility with its setting, and recommends modifications for further study and development. Chapter I presents study background, purposes, and methods. Chapter II outlines political, geographical, age, educational, economic, health, social, and agricultural characteristics of the case's south central Minnesota setting. Chapter III analyzes size, facilities, finances, governance, staff, scheduling, curriculum, students, and perceptions of school personnel and community members of the participating school districts. Chapter IV focuses on the history, legal structure, financing and costs, size, staff, scheduling and curriculum, students, and transportation needs of the center. Chapters V through VII detail consumer homemaking, occupational home economics, and vocational agricultural programs. Chapter VIII offers a summary, conclusions, and recommendations. Identified as strengths of the centralized center are its provision for leadership, development, and initiatives regarding the center and its specialized facilities and teaching staff. The most troublesome weaknesses include the necessity for students to travel and the inequalities of access among the school districts. (NEC)

ED270286

Access to Educational Opportunity in Rural Communities: Alternative Patterns of Delivering Vocational Education in Sparsely Populated Areas

Volume 4: The Interdistrict Cooperative Center: A Centralized Center

Roland L. Peterson
Ruth G. Thomas
M. Jane Anderson
Rick W. Rabideau

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

RC 015817

Station Bulletin AD-SB-2852
Agricultural Experiment Station
University of Minnesota 1986

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

University of Minnesota

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ACCESS TO EDUCATIONAL OPPORTUNITY IN RURAL COMMUNITIES: ALTERNATIVE PATTERNS OF DELIVERING VOCATIONAL EDUCATION IN SPARSELY POPULATED AREAS

Volume 4: The Interdistrict Cooperative Center: A Centralized Center

Roland L. Peterson
Ruth G. Thomas
M. Jane Anderson
Rick W. Rabideau

AD-SB-2852
Agricultural Experiment Station
University of Minnesota
St. Paul, MN 55108
1986

Roland L. Peterson and Ruth G. Thomas are professor of Agriculture Education and associate professor of Home Economics Education, respectively, at the University of Minnesota, 325 Vocational Education Building, 1954 Buford Avenue, St. Paul, MN 55108. M. Jane Anderson and Rick W. Rabideau were research assistants for this project.

BEST COPY AVAILABLE

ACCESS TO EDUCATIONAL OPPORTUNITY IN RURAL COMMUNITIES:
ALTERNATIVE PATTERNS OF DELIVERING VOCATIONAL EDUCATION
IN SPARSELY POPULATED AREAS

Volume 1: Problem, Study Design and Procedures, Findings, Conclusions and Recommendations. Thomas, R. and Peterson, R.

Volume 2: The Heartland Vocational Center: A Decentralized Center. Thomas, R.; Peterson, R.; Anderson, M.J.

Volume 3: The Northwest Multi-District: A Mobile Facilities Center. Peterson, R.; Thomas, R.; Anderson, M.J.

Volume 4: The Inter-district Cooperative Center: A Centralized Center. Peterson, R.; Thomas, R.; Rabideau, R.; Anderson, M.J.

Volume 5: The Clay-Wayne County Joint Agreement: A Decentralized Noncenter Agreement. Thomas, R.; Peterson, R.; Rabideau, R.

Volume 6: Glencoe, Lester Prairie, Brownton: A Centralized, Noncenter Agreement. Peterson, R.; Thomas, R.; Rabideau, R.

BEST COPY AVAILABLE

TABLE OF CONTENTS

	Page
List of Tables	v
List of Figures	vii
Acknowledgments	viii
Chapter I: Study Background, Purpose and Method	1
Chapter II: Setting	9
Political Setting	9
Geography	10
Population Size, Age and Sex Characteristics	10
Economic Characteristics	13
Educational Characteristics	16
Social Characteristics	16
Community Services and Recreational Opportunities	18
Agricultural Characteristics	19
Summary	22
Chapter III: School Districts	23
Size	23
Facilities	24
Finances	25
Governing Body	27
Staff	27
Scheduling and Courses Offered	29
Students	29
Summary	30
Chapter IV: Centralized Center	31
History	31
Governance, Management and Legal Structure	31
Facilities	32
Financing and Costs	32
Size	32
Staff	32
Scheduling and Curriculum	32
Transportation	34
Students	34
Perceptions of School Personnel and Community Members	35
Summary	36
Chapter V: Consumer Homemaking Program	38
Size	38
Facilities and Equipment	38
Finances	39
Management	39
Staff	39
Materials	40
Scheduling and Curriculum	40
Students	40
Summary	41

Page

Chapter VI: Occupational Home Economics Program 42

Size 42
Facilities and Equipment 42
Finances 42
Management 42
Staff 42
Materials 42
Scheduling and Curriculum 43
Students 43
Perceptions of School Personnel and Community Members 43
Summary 44

Chapter VII: Vocational Agriculture Program 45

Size 45
Facilities and Equipment 46
Finances 46
Management 46
Staff 47
Materials 47
Scheduling and Curriculum 47
Students 47
Perceptions of School Personnel and Community Members 47
Summary 48

Chapter VIII: Summary, Conclusions and Recommendations 49

Summary 49
Conclusions 51
Recommendations 53

Resources and References 55

BEST COPY AVAILABLE

LIST OF TABLES

Page

Table 1. Research questions, data to be obtained, source(s) of data and method of data collection 4

Table 2. Number of persons located in LeSueur and Nicollet counties of Minnesota, 1950-1978. 11

Table 3. Population projections, LeSueur and Nicollet counties and the State of Minnesota, 1970-2000 11

Table 4. 1950-1977 population trends and county of location for the communities of LeCenter, Nicollet, St. Peter, and Cleveland. 12

Table 5. Population estimates for LeSueur and Nicollet counties in Minnesota by age and sex, 1975. 13

Table 6. Rural farm and rural nonfarm population for LeSueur and Nicollet counties, persons 25 years of age and over, 1970 13

Table 7. Median income and percent of families at extreme income levels in LeSueur and Nicollet counties, 1970. 14

Table 8. Number of employed farm and nonfarm workers in LeSueur and Nicollet counties in 1970 14

Table 9. First and fourth quarter employment and total wages paid for selected occupational areas in LeSueur and Nicollet counties, 1978. 15

Table 10. Median school years completed for rural farm and nonfarm populations 25 years of age and older in LeSueur and Nicollet counties, 1970 16

Table 11. School completion levels of persons 25 years of age or older in LeSueur and Nicollet counties and by rural farm and nonfarm population, 1970 . . . 17

Table 12. Average number of persons per household and per family in LeSueur and Nicollet counties, 1980. 17

Table 13. Racial distribution in LeSueur and Nicollet counties, 1980 18

Table 14. Marital history of persons 15 to 54 years of age in LeSueur and Nicollet counties, 1980. 18

Table 15. Families living with own children, LeSueur and Nicollet counties, 1980 . . 19

Table 16. Size and number of farms in LeSueur and Nicollet counties, 1969 and 1974 20

Table 17. Cash income in thousands of dollars received by farmers in LeSueur and Nicollet counties, 1975, 1977, 1979. 20

Table 18. Hay, oats, corn, and soybean production in LeSueur and Nicollet counties, 1976 and 1979. 21

Table 19. Number of livestock by type in LeSueur and Nicollet counties, 1977, 1978 and 1979. 21

Table 20. Number of square miles in the St. Peter, Cleveland, LeCenter, and Nicollet school districts, 1980. 23

BEST COPY AVAILABLE

Page

Table 21. Number of students enrolled in St. Peter, Cleveland, LeCenter, and Nicollet school districts on an average daily membership (ADM) or October 1 basis, 1978-79. 24

Table 22. Pupil density index: Number of pupils (ADM) per square mile, 1978-1979. 25

Table 23. Percentage of total revenues obtained from various sources, 1977-1978. 25

Table 24. Tax rates for St. Peter, Cleveland, LeCenter, and Nicollet, 1977-1978. 26

Table 25. School district expenditures by accounting categories, 1977-1978 28

Table 26. Administrative and instructional staff, 1979-80. 28

Table 27. Professional staff in relation to number of pupils, 1979-80. 29

Table 28. Enrollments in center courses, spring semester, 1980 33

Table 29. Number of students enrolled in the consumer homemaking programs, grades 7-12, at Nicollet, LeCenter, St. Peter, 1978-79 and Cleveland, 1979-80 38

Table 30. Consumer homemaking program budgets for LeCenter, Nicollet, and St. Peter public schools, 1979-80. 39

Table 31. Number of students enrolled in the vocational agriculture program at St. Peter, Nicollet, and LeCenter, 1979-80. 45

Table 32. Secondary vocational agriculture program budgets for St. Peter, Nicollet, and LeCenter public schools for the 1979-80 school year 46

BEST COPY AVAILABLE

LIST OF FIGURES

		Page
1.	Conceptual Model of Approaches and Patterns for Delivering Vocational Education.	2
2.	List of Input and Outcome Variables Relevant to Vocational Education Delivery Patterns.	3
3.	Locations of the Four Communities Participating in the Interdistrict Centralized Center	10

ACKNOWLEDGMENTS

This study was supported by funds from the University of Minnesota Agricultural Experiment Station. The researchers wish to express sincere thanks to Richard Sauer, Director of the Minnesota Agricultural Experiment Station for his support of the project.

Thanks are also due to: Ray Colvin, Director of the Interdistrict Cooperative Center who hosted the research team, provided helpful information regarding the functions and features of the Interdistrict Center, and reviewed the final report; the superintendents and principals in the St. Peter, LeCenter, Nicollet, and Cleveland schools for their efforts in completing school data forms and answering questions during interview sessions; and the vocational agriculture and home economics teachers, guidance counselors, board members, citizen advisory committee members, parents of students, and students enrolled in various vocational programs who contributed valuable insights concerning the programs and operation of the Interdistrict Center. Without the support and input of these individuals, this case study would not have been completed.

The efforts of the following individuals were also essential in the preparation of this volume: Mary Ann Smith, assistant professor of extension education and Gary Leske, associate professor of agriculture education at the University of Minnesota who provided reviews of the manuscript; Ginny Pearson, who typed the original manuscript; LaRayne Kuehl and Merri Fromm, Minnesota Research and Development Center, Department of Vocational and Technical Education, who revised the manuscript on the word processor, and John Colmey, Agricultural Experiment Station, who edited the manuscript and coordinated its publication.

BEST COPY AVAILABLE

CHAPTER I

STUDY BACKGROUND, PURPOSE, AND METHOD

The Interdistrict Cooperative Center case study is one of a series of case studies completed between 1980 and 1983 under a project sponsored by the University of Minnesota Agricultural Experiment Station. These case studies were part of an inquiry begun in 1978 to address the problem of access of rural students to vocational education through inter-school district cooperation.

The case studies had four purposes: 1) identify, describe, and analyze means of delivering vocational education in sparsely populated rural areas that involve cooperation among school districts; 2) provide an information base relevant to state and local policy questions regarding such programs; 3) make recommendations regarding the appropriateness of each form of cooperation studied for various community and geographical settings; and 4) generate concepts and hypotheses to guide further study and development of educational delivery in sparsely populated rural areas. Each case study addressed the following questions:

1. What are the essential features of this form of inter-school district cooperation?

2. How does the cooperative arrangement work? What factors seem to facilitate or impede its operation and the maintenance of cooperation between school districts?

3. How does the cooperative arrangement fit with the characteristics of its setting (i.e., with geographical, community and school district characteristics)?

4. What consequences does the cooperative arrangement have for educational access and quality?

5. How might the cooperative arrangement be modified?

While there are several existing and potential approaches to delivering vocational education to varied audiences in sparsely populated rural areas, the case studies in this series are limited to approaches that are managed by school districts, serve secondary students, and involve cooperation among school districts. The portion of the case studies concerned with specific vocational programs focuses on agriculture and home economics programs.

The general model from which the case studies were generated is presented in Figure 1. Only the portion of Figure 1 which concerns cooperative school patterns is addressed by this series of case studies. The Interdistrict Cooperative Center case study represents an example of the centralized center variation of the center cooperative school pattern. Relevant literature was reviewed and the model presented in Figure 1 was formulated in an earlier publication (Peterson, et al., 1981).

Case study methodology was used for developing a general understanding of inter-school district cooperation because it provides detailed description based on in-depth observation and can uncover underlying factors unlikely to be discovered using less intensive methodologies. However, it also limits the generalizability of the data. The trade-off seemed appropriate given the goal of understanding the patterns of inter-school district cooperation and the sparse knowledge regarding the delivery of vocational education in rural areas. Potentially critical variables must be identified before they can be studied using research methods that lead to broadly generalizable results.

BEST COPY AVAILABLE

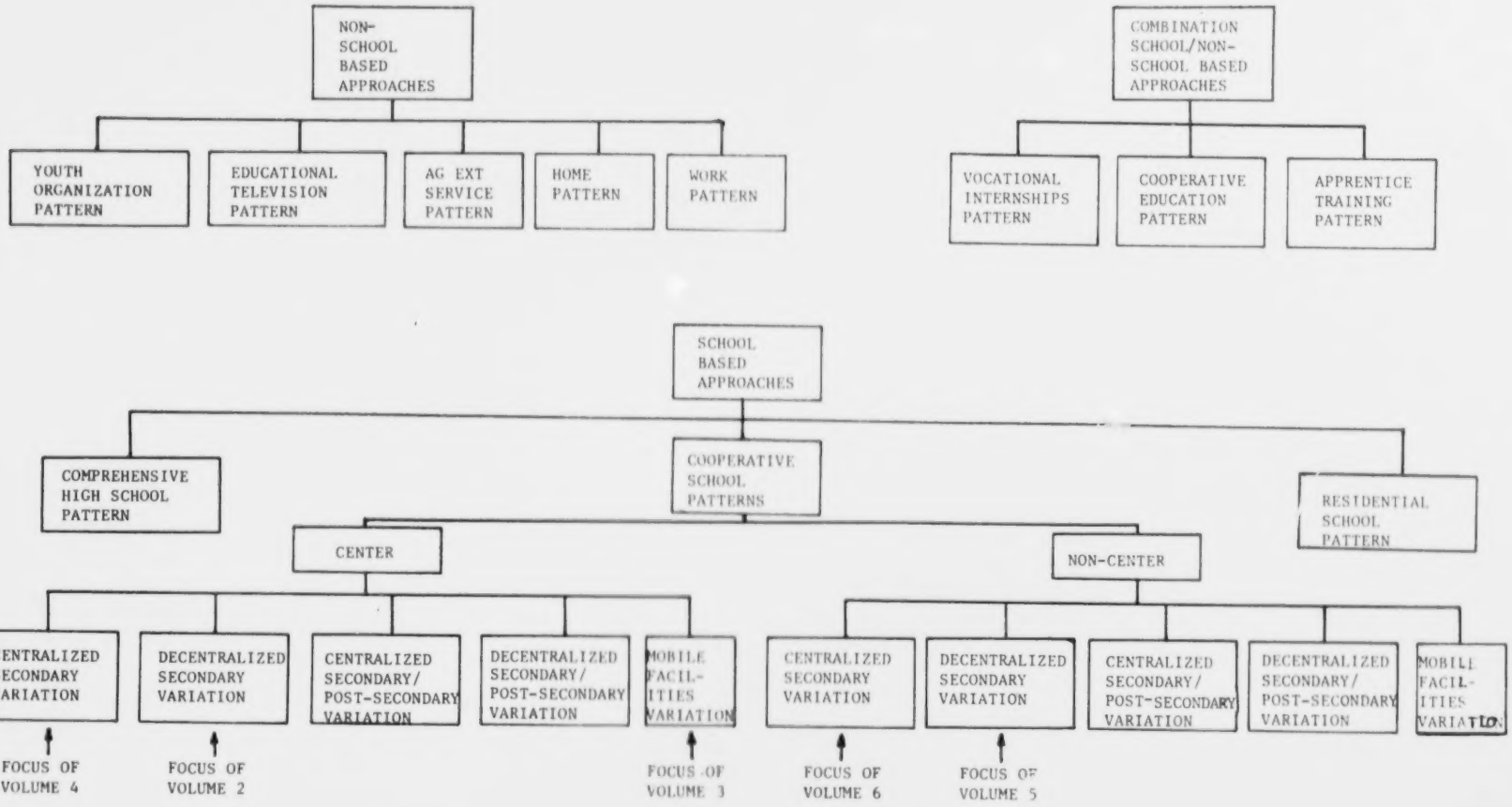

Figure 1. Conceptual model of approaches, patterns and variations for delivering vocational education

BEST COPY AVAILABLE

Instruments and data collection procedures were developed to address the variables listed in Figure 2. These variables were selected on the basis of a literature review presented earlier (Peterson et al., 1981). The relationships among the research questions, data collected, data sources, and the data collection methods are presented in Table 1. One set of instruments, which required data from records and other descriptive information, was sent to the site for completion prior to the site visit. A second set of instruments was used to guide on-site observations and interviews with school personnel and community members. Instruments, study design, and procedures were pilot-tested in February and March 1980 in the Interdistrict Cooperative Center site. This volume reports the pilot study.

PROGRAM INPUTS	SCHOOL INPUTS	COMMUNITY INPUTS
curriculum	governance	size
program size	total curriculum	population density
travel involved	school size	geographical location
facilities	school facilities	cultural/ethnic character
student	students	socioeconomic character
age	college/vocational orientation	tax base
attitude	families	unemployment rate
grade level	special needs	poverty level
prior education	dropout rates	average age
dropout rate	school district administration	educational level
ethnicity	budget resource base	mobility
program administration	school schedules	employment opportunities
program staff	school staff	educational opportunities
size	size	
qualifications	qualifications	
attitudes	attitudes	
teaching loads	policies	
cost		
schedules		
advisory groups		
student organization		
policies		

Student Outcomes	Community Outcomes
skills and abilities	trained personnel
attitudes	program and school knowledge
future plans	program and school relationships
future placement	

Figure 2. Input and outcome variables relevant to vocational education delivery patterns.

Study sites were chosen by locating delivery systems fitting the conceptual model in Figure 1 through a selected state and comprehensive national survey. The pool of potential sites was limited to small rural school districts which offered both agriculture and home economics programs since the delivery of these vocational programs in sparsely populated

BEST COPY AVAILABLE

Table 1. Research questions, data to be obtained, source(s) of data and method of data collection

Research Questions	Data to be Obtained	Data Source(s)	Method of Data Collection
1. What are the essential features of this form of inter-school district cooperation?	1. Number of facility locations	Cooperative arrangement administrator(s) and direct observation	Interviews, on-site observations
	2. Type of governance structure	Cooperative arrangement administrator(s) and governance documents	Interviews, on-site observations, document analysis
	3. Structure, responsibility and role of administrative staff	Cooperative arrangement administrator(s) and governance documents	Interviews, document analysis
	4. Structure and responsibility of teaching staff	Cooperative arrangement administrator(s) and teaching staff	Interviews, questionnaires
	5. Financial structure(s)	Cooperative arrangement administrator(s), policy-makers and agreement documents	Interviews, questionnaires, document analysis
	6. Nature of legal agreements between schools	Agreement documents	Document analysis
	7. Approval mechanisms	Agreement documents, State Dept. of Education	Document analysis, interviews
	8. Transportation patterns	Cooperative arrangement administrator(s)	Interviews, questionnaires
	9. Vocational curriculum	Cooperative arrangement administrator(s), student handbook	Interviews, questionnaires, document analysis

BEST COPY AVAILABLE

Table 1. (con't)

Research questions, data to be obtained, source(s) of data and method of data collection

Research Questions	Data to be Obtained	Data Source(s)	Method of Data Collection
2. How does the cooperative arrangement work? What factors seem to facilitate or impede its operation and the maintenance of cooperation between school districts?	1. Communication networks among schools	Cooperative arrangement administrator(s) teachers, agreement documents	Interviews, questionnaires, document analysis
	2. Perceived need for cooperation	Cooperative arrangement policy makers, school administrators, community members, teachers	Interviews, questionnaires
	3. Perceived benefits from cooperation	Cooperative arrangement policy makers, school administrators, community members, teachers	Interviews, questionnaires
	4. Transportation	Cooperative arrangement and school administrators	Interviews, questionnaires
	5. Schedules	Cooperative arrangement and school administrators	Interviews, questionnaires
	6. Enrollments	Cooperative arrangement and school administrators, state reports	Questionnaires, reports analysis
	7. Attitudes	Cooperative arrangement and school administrators, policy makers, teachers, community members	Interviews, questionnaires
	8. Resources	Cooperative arrangement and school administrators, policy makers, state reports	Questionnaires, interviews, report analysis

Table 1. (con't.)

Research Questions, data to be obtained, source(s) of data and method of data collection.

Research Questions	Data to be Obtained	Data Source(s)	Method of Data Collection
3. How does the cooperative arrangement fit with the characteristics of its setting (i.e., with geographical, community and school district characteristics)?	1. Attitudes toward education	School administrators, teachers, policy-makers, community members, students, parents	Interviews, questionnaires
	2. Resources provided to school	State-generated reports	Report analysis
	3. Future education and career plans of high school graduates	School counselors students, parents	Interviews, questionnaires
	4. Community demography, cultural and ethnic background	U.S. Census, Dept. of Economic Security	Document analysis
	5. Community resources	State Dept. of Economic Security, local telephone book, direct observations	Document analysis, on-site observations
	6. Community economic patterns	Dept. of Economic Security, U.S. Census	Document analysis
	7. Community health statistics	Dept. of Public Health	Document analysis
	8. Physical geography	Direct observation	On-site observation
	9. Transportation systems available	State Dept. of Economic Security, maps	Document analysis
	10. School district enrollments, class size	State reports, school administrators	Report analysis, questionnaires
	11. School district income, expenditures	State reports	Report analysis, questionnaires
	12. School district faculty and administration size, qualifications	School administrators	Questionnaires

BEST COPY AVAILABLE

Table 1. (Cont'd.)

Research questions, data to be obtained, sources(s) of data and method of data collection[1].

Research Questions	Data to be Obtained	Data Source(s)	Method of Data Collection
	13. School district facilities	School administrators, direct observation	Questionnaires, interviews, on-site observation
	14. School district schedules	School administrators	Questionnaires, interviews
	15. School district curricula	Student handbook	Document analysis
	16. School district student transportation patterns	School administrators	Questionnaires, interviews
4. What consequences does the cooperative arrangement have for educational access and quality?	1. Access		
	a. Number of students enrolled in cooperative delivery mechanisms	Cooperative arrangement and schooi administrators, teachers	Questionnaires, interviews
	b. Curriculum available to studnts	Cooperative arrangement and school administrators, handbooks, reports	Questionnaires, interviews document analysis
	c. Transportation requirements for students	Cooperative arrangement and school administrators	Interviews, questionnaires
	d. Schedules	Cooperative arrangement and school administrators, faculty	Interviews, questionnaires
	2. Quality		
	a. Student organization functioning	Cooperative arrangement and school administrators, teachers	Interviews
	b. Faculty qualifications	Cooperative arrangement and school administrators, faculty	Interviews, questionnaires
	c. Facilities	Cooperative arrangement and school administrators, faculty, direct observation	Interviews, questionnaires, on-site observation

[1]Research question five is not included in the table since it involves extension from and interpretation of the data rather than data collection.

BEST COPY AVAILABLE

areas was of particular interest. Further criteria in site selection included willingness of school officials and others at the site to be involved in the study and accessibility within resource constraints of the project.

All selected sites contacted agreed to participate, although in some instances individual school districts did not participate in the full-scale data collection. Interviews were scheduled by school personnel in advance of the site visit. The site visit involved a team of three researchers who spent one to three days conducting interviews and observing the cooperative arrangement in action. Interviews were conducted with vocational directors, school superintendents, principals and board members, vocational program advisory committee members, home economics and agriculture teachers, school counselors, and parents of students. State guidelines and legal structures were obtained from state department of education staff. A profile of the setting was constructed on the basis of data obtained from the U.S. Census, state agencies, on-site observations, and pre-visit questionnaires. Data from the 1980 U.S. Census were not available at the time site profiles were developed, so 1970 census data were used and supplemented by more recent data from state and other Federal agencies. In some instances, data comparable across years and communities were unavailable.

Data presented here were collected in February and March 1980. A comparative analysis of all five case studies is presented in Volume 1 of this series (see p. ii) and provides an analytical discussion of the significance and implications of the descriptive information contained in each of the case studies.

CHAPTER II

SETTING

Political Setting

Two Minnesota statutes provided the basis for the formal cooperation between school districts represented by a vocational center. House file No. 1489, Section 1 established public corporations called cooperative centers for vocational education and was approved in March of 1974. Previous legislation in 1967 and 1969 had provided the opportunity for school districts to cooperate and some centers had been initiated in the state prior to 1974.

The cooperative vocational center legislation allowed two or more school districts to "enter into an agreement to establish a cooperative center to provide for vocational education and other educational services upon the vote of a majority of the full membership of each of the boards entering into the agreement." The law provided for the creation of a center board and required representation from each participating school district on this board. Powers given to the center board included general charge of the business of the center, ownership of facilities, employment of teachers, and contracting for other services. The center board was not given the power to issue bonds.[1] Rather, the board was given the power to assess participating school districts for their share of all expenses, capital expenditures, and indebtedness associated with the center.

Educational programs could be provided through the center for high school and adult phases of vocational instruction. The high school phase was to be offered as an integral part of the comprehensive curriculum offered by each participating school district. Students were to graduate from their resident high school districts.

As a public corporation, the center board had the power to receive and disburse federal, state, and local funds made available to it. The formula for assessing school districts their proportionate share of expenses was not specified beyond an equitable distribution formula agreed upon by the participating districts and approved by the state commissioners of education and state board for vocational education.

State board of education approval of the agreement between school districts was required for the initiation of a center. The addition of school districts to center membership required approval of a majority of the board of the district concerned, the center board, and the state board of education. Withdrawal of a school district from the center required approval of a majority of the board of the school district concerned and compliance with provisions in the agreement establishing the center. Withdrawal was effective at the end of the next school year and did not release the withdrawing district from liability for bonded indebtedness it incurred prior to the effective withdrawal date.

The second Minnesota law underlying vocational centers but also providing for non-center forms of inter-school district cooperation was the Joint Exercise of Powers statute. This law allowed two or more governmental units (including school districts), by agreement entered into through action of their governing bodies, to jointly or cooperatively exercise any power common to the contracting bodies.

This law required an agreement between the units but did not require a joint board or approval by state regulating bodies. Parties to the agreement were given the authority to disburse public funds in an unspecified manner, the only restrictions being those to which the participating parties were already subject. Provisions for termination of agreements and distribution of property were addressed in general terms with few specific provisions.

---

[1] Laws of Minnesota for 1974, p. 387.

The number of Minnesota centers grew rapidly in the 1970s with the legal structures in place and the policies in the State Department of Education directed at their development. The economic slump in the early 1980s brought a halt to this growth, and existing centers began to dissolve as school districts withdrew their membership. In some cases, school districts that had been members of centers elected to cooperate under noncenter arrangements.

Geography

The school districts in the Interdistrict Center were located in Nicollet and LeSueur counties in south central Minnesota in the Minnesota River valley. The countryside has rich, fertile soil and flat to rolling topography. The area along the river valley is rough and wooded. The area is studded with farms which produce corn, soybeans, hay, and vegetable crops destined for a nearby cannery. Although primarily a farming region, the area also has many lakes.

The four communities involved in the center were located on or near a major arterial highway which stretches between Mankato, one of the four largest communities in rural Minnesota (population approximately 40,000), and Minneapolis-St. Paul.

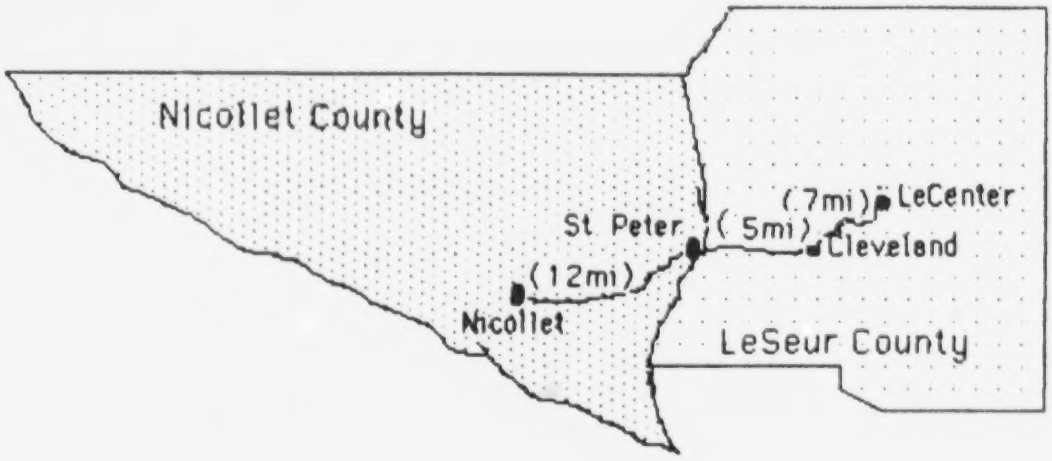

Figure 3. Locations of the Four Communities Participating in the Interdistrict Centralized Center.

Population Size, Age, And Sex Characteristics

Table 2 presents population trends for Nicollet and LeSueur counties. The data are based on census data and births, deaths, school enrollments, and motor vehicle registrations reported by Minnesota agencies.

Table 2 shows that during a 28-year span, from 1950 to 1978, Nicollet County experienced an increase of 4,071 persons, a growth of 19.5 percent. During the same period of time, LeSueur County experienced a similar gain in population, increasing from 19,088 in 1950 to 22,100 in 1978 (an increase of 3,012 persons, or 15.8 percent). It should also be noted that, although these population increases appear to be significant, population growth was only about half that of the state's average gain.

Table 2. Number of persons located in LeSueur And Nicollet counties of Minnesota, 1950-1978.

Year	LeSueur County	Nicollet County	State
1950	19,088	20,929	2,982,483
1960	19,906	23,196	3,413,864
1970	21,332	24,518	3,806,103
1975	22,300	24,600	3,921,000
1978	22,100	25,000	4,008,000
Percent Change	+ 15.8	+ 19.5	+ 34.4

Source: U.S. Department of Commerce, Bureau of the Census, 1970 Census of Population and Minnesota State Planning Agency, State Demographer.

Population projections for LeSueur and Nicollet counties are presented in Table 3. The projections in Table 3 are based on assumptions about births, deaths, and migration and take into consideration the recent trends in migration, fertility, and employment. It should be noted that the projected population increases for both counties (9.4 and 10.3 percent) are lower than the average projected change for the state as a whole (16.0 percent).

Table 3. Population projections, LeSueur and Nicollet counties and the State of Minnesota, 1970 to 2000.

Year	LeSueur	Nicollet	State
1970	21,300	24,500	3,806,100
1980	22,200	25,600	4,070,600
1990	23,000	26,600	4,329,700
2000	23,500	27,300	4,529,600
Total and Percent Change	2,200 9.4	2,800 10.3	723,500 16.0

Source: U.S. Department of Commerce, Bureau of the Census, 1970 Census of Population, and Minnesota State Planning Agency, State Demographer.

BEST COPY AVAILABLE

Table 4 contains population trends for the communities involved in the Interdistrict Center. These trends for the four communities do not reflect the area's growth in the later years as the county-wide trends do.

Table 4 illustrates that, although the population grew in the 1950's in these communities, by the 1970's population in the smaller communities of Cleveland and Nicollet stabilized at +0.4 and -0.4 percent respectively. The population in the larger communities of St. Peter and LeCenter began to decline in the later periods, indicating a change rate of -2.4 percent in St. Peter, and -8.5 percent in LeCenter during the 1970's.

Table 4. 1950-1977 population trends and county of location for the communities of LeCenter, Nicollet, St. Peter, and Cleveland.

	LeSueur County		Nicollet County	
Year	Cleveland	LeCenter	Nicollet	St. Peter
1950	325	1,314	493	7,754
1960	389	1,597	493	8,484
Percent Change	+19.7	+21.5	0	+9.4
1960	389	1,597	493	8,484
1970	492	1,890	618	8,339
Percent Change	+26.5	+18.3	+25.4	-1.7
1970	492	1,890	618	8,339
1977	494	1,729	615	8,138
Percent Change	+0.4	-8.5	-0.4	-2.4

Source: U.S. Department of Commerce, Bureau of the Census, 1970 Census of Population and 1978 Supplement.

Population composition estimates in terms of age and sex for LeSueur and Nicollet counties are presented in Table 5. These estimates were developed by the Minnesota state demographer from reports of births, deaths, public and non-public school enrollments, drivers license registrations, and 1970 Medicare counts.

These data illustrate that the largest section of the population in LeSueur and Nicollet counties was projected to be in the 18 to 64 age group. Table 5 also shows that the two counties were projected to be very similar in all age group categories.

Residents of LeSueur and Nicollet counties that were 25 years of age or older were classified in two groups as rural farm, or rural nonfarm. According to the 1970 Census, persons living on land tracts of ten acres or more from which sales of farm products amounted to $50 or more the previous year were classified as part of the rural farm population. Persons living on tracts of land with fewer than ten acres but having farm product sales of $250 or more were also classified in the rural farm category. The rural nonfarm population includes all persons which are not included in either the rural farm or urban categories.

The fact that nearly half (46.4 percent) of the population over age 25 were included in the rural farm segment of the population in LeSueur and Nicollet counties reflects the agricultural nature of this area of the state. These data are exhibited in Table 6.

Table 5. Population estimates for LeSueur and Nicollet counties in Minnesota by age and sex, 1975.

Age Range	LeSueur County						Nicollet County					
	Male		Female		Total		Male		Female		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Under 18	4,090	18.3	3,800	1.71	7,890	35.4	3,900	15.9	3,640	14.8	7,540	30.7
18-64 Years	5,470	24.5	5,630	25.2	11,100	49.7	7,310	29.7	7,040	28.6	14,350	58.3
65 & Over	1,520	6.8	1,790	8.0	3,310	14.8	1,170	4.8	1,540	6.3	2,710	11.1
Total	1,080	49.7	11,220	50.3	22,300	100.0	12,380	50.3	12,220	49.7	24,600	100.0

Source: Minnesota State Planning Agency, State Demographer.

Table 6. Rural farm and rural nonfarm population for LeSueur and Nicollet counties, persons 25 years of age and over, 1970.

County	Farm		Nonfarm		Total
	N	Percent	N	Percent	
LeSueur	3,467	38.9	5,440	61.1	8,907
Nicollet	2,704	61.5	1,691	38.5	4,395
Total	6,171	46.4	7,131	53.6	13,302

Source: U.S. Department of Commerce, Bureau of the Census, 1970 Census of Population.

Economic Characteristics

In this section a number of economic and employment characteristics are examined. Table 7 illustrates the median income in 1970 for LeSueur and Nicollet counties and the percentage of families with incomes below the poverty level and over $15,000.

The median income for families in LeSueur and Nicollet counties was similar. Both counties had median incomes that were approximately $2,000 less than the state average in 1970. Both counties had a smaller proportion of residents earning $15,000 or more than did the state as a whole.

Table 8 presents county labor force characteristics based on 1970 U.S. Census data. Both the rural farm and rural nonfarm males participated in the civilian labor force to a larger extent than did the females. In both counties the ratio was approximately three males for every female in the labor force. In all but one category, unemployment rates for females were lower than for males. In all but one category, employment rates were higher for nonfarm than for farm workers.

Table 7. Median income and percent of families at extreme income levels in LeSueur and Nicollet counties, 1970.

County	Median Income (Dollars)	Percent	
		Less Than Poverty Level	$15,000 or More
LeSueur	$7,939	10.2	14.6
Nicollet	$7,786	8.1	15.6
Minnesota Average	$9,931	8.2	20.3

Source: U.S. Department of Commerce, Bureau of the Census, 1970 Census of Population.

Table 8. Number of employed farm and nonfarm workers in LeSueur and Nicollet counties in 1970.

Employment Status	LeSueur County				Nicollet County			
	Rural Farm		Rural Nonfarm		Rural Farm		Rural Nonfarm	
	N	%	N	%	N	%	N	%
Males 16 And Older								
Employed	1,665	95.3	2,091	93.3	1,583	98.6	747	88.6
Unemployed	83	4.7	151	6.7	22	1.4	96	11.4
Total Male Labor Force	1,748	100.0	2,242	100.0	1,605	100.0	843	100.0
Percent Of Males In Labor Force	-	74.5	-	62.7	-	77.0	-	66.5
Percent of County Labor Force	-	29.5	-	37.9	-	47.9	-	25.1
Females 16 And Older								
Employed	563	94.1	1,252	93.8	470	97.9	420	98.8
Unemployed	35	5.9	83	6.2	10	2.1	5	1.2
Total Female Labor Force	598	100.0	1,335	100.0	480	100.0	425	100.0
Percent of Females In Labor Force	-	25.5	-	37.3	-	23.0	-	33.5
Percent Of County Labor Force	-	10.1	-	22.5	-	14.3	-	12.7
Total County Labor Force	2,346	100.0	3,577	100.0	2,085	100.0	1,268	100.0

Source: U.S. Department of Commerce, Bureau of the Census, 1970 Census of Population.

Table 9 depicts the total wages paid in various occupational areas during the year of 1978 and shows that the two counties were similar in both employment and wages paid in 1978. Nicollet County had slightly greater numbers employed and slightly more dollars paid in wages than did LeSueur County. Only in the total government category do the counties differ appreciably in employment with Nicollet County's employment and wages paid twice that of LeSueur County.

Table 9. First and fourth quarter employment and total wages paid for selected occupational areas in LeSueur and Nicollet counties, 1978.

Occupational Areas	LeSueur County				Nicollet County			
	First Quarter Employment	Total Wages Paid	Fourth Quarter Employment	Total Wages Paid	First Quarter Employment	Total Wages Paid	Fourth Quarter Employment	Total Wages Paid
Construction	277	674,610	373	1,170,689	257	713,258	474	1,652,794
Manufacturing	2,394	7,080,327	2,257	7,741,346	2,104	4,265,629	2,411	5,264,170
Transportation, Communications, and Utilities	104	261,393	124	405,284	137	263,091	164	444,948
Trade	1,526	2,381,200	1,600	2,952,005	1,539	2,686,152	1,623	3,110,380
Finance, Insurance, and Real Estate	171	386,709	197	535,619	166	389,793	180	494,496
Services	820	1,242,249	914	1,224,906	999	1,948,247	951	1,665,674
Total Private	5,235	2,061,721	5,497	14,128,848	5,204	10,266,170	5,814	12,632,762
Total Government	873	2,176,061	869	2,342,263	1,624	4,294,996	1,607	4,310,637
Grand Total	6,108	14,237,782	6,366	16,471,111	6,828	14,516,166	7,421	16,943,399

Source: Minnesota Department of Economic Security, Minnesota Employment and Wages by County, 1978.

BEST COPY AVAILABLE

Educational Characteristics

Table 10 illustrates that there was very little difference in the educational levels between the farm and nonfarm groups in LeSueur County. However, this was not the case in Nicollet County. The median school years for the farm population was 9.9 in Nicollet County, while the nonfarm population had a median education level of 12.1 years. This situation is further explained in Table 11.

Table 10. Median school years completed for rural farm and nonfarm populations 25 years of age and older in LeSueur and Nicollet counties, 1970.

County	Farm	Non-Farm
LeSueur	10.5	10.4
Nicollet	9.9	12.1

Source: U. S. Department of Commerce, Bureau of the Census, 1970 Census of Population.

Table 11 reflects the 1970 educational characteristics of rural farm and rural nonfarm residents of LeSueur and Nicollet counties. It should be noted that, when the various levels of attendance are compared for the farm and nonfarm residents for Nicollet County, the nonfarm residents had a higher percentage of people in all but one of the categories above the 1 to 3 years of high school level. This accounts for the higher median education level noted in Table 10.

A host of post-secondary institutions offering four-year baccalaureate degrees and two-year and nondegree programs were located within a 70 mile radius of the four communities. Baccalaureate degree institutions included the University of Minnesota and several private colleges located in the Twin Cities, two private colleges located within 50 miles in Northfield, a third private college and Mankato State University within 12 miles in Mankato, and a private college located in St. Peter. The nearest community college was located in Bloomington, 60 miles to the north. A university technical college was located at Waseca, 50 miles away. Three area vocational technical institutes were located within a 50 mile radius at Mankato, Faribault, and Eden Prairie.

Social Characteristics

This section presents descriptive information regarding selected social characteristics of Nicollet and LeSueur counties. Family size, racial distribution, marital status, and parental status are among these characteristics represented.

Table 12 indicates the average number of persons per household and family in LeSueur and Nicollet counties. The average number of persons per household, approximately three, was similar to the average number of persons per family, suggesting that most households were single family households.

Table 13 shows the distribution of white, black, and Spanish origin individuals in the two counties. A predominance of white population is apparent with a small population of Spanish origin and an extremely small number of black persons in the two counties.

Table 14 provides a picture of the marital history of persons in LeSueur and Nicollet counties, ages 15-54. Nicollet County had a slightly higher marriage dissolution rate than did LeSueur County, but both counties were substantially below state and national averages on this variable.

BEST COPY AVAILABLE

Table 11. School completion levels of persons 25 years of age or older in LeSueur and Nicollet counties and by rural farm and nonfarm population, 1970.

Levels Of Attendance	Rural Farm				Rural Nonfarm			
	LeSueur County		Nicollet County		LeSueur County		Nicollet County	
	N	Percent	N	Percent	N	Percent	N	Percent
No School Completed	-	0	26	1.0	43	.8	4	.2
Elementary 1-4 Years	97	2.8	30	1.1	191	3.5	47	2.8
Elementary 5-7 Years	382	11.0	203	7.5	634	11.7	144	8.5
Elementary 8 Years	1,043	30.1	1,007	37.2	1,492	27.4	402	23.8
High School 1-3 Years	437	12.6	297	10.3	787	14.5	172	10.2
High school 4 Years	1,164	33.6	850	31.4	1,533	28.2	595	35.2
College 1-3 Years	216	6.2	235	8.7	453	8.3	192	11.4
College 4 Years Or More	128	3.7	74	2.7	307	5.6	135	8.0
Total Persons 25 Years or older	3,467	100.0	2,704	100.0	5,440	100.0	1,691	100.0

Source: U.S. Department of Commerce, Bureau of the Census, 1970 Census of Population.

Table 12. Average number of persons per household and per family in LeSueur and Nicollet counties, 1980.

County	Persons/Household	Persons/Family
LeSueur	2.96	3.44
Nicollet	3.17	3.57

Source: U.S. Department of Commerce, Bureau of the Census, 1980 Census of Population, Part 25, PC80-1-C25, Characteristics of the Population, General Social and Economic Characteristics: Minnesota, August, 1983.

BEST COPY AVAILABLE

Table 13. Racial distribution in LeSueur and Nicollet counties, 1980.

County	White Population	Black Population	Spanish Origin Population
LeSueur	8,680	2	29
Nicollet	18,523	6	76

Source: U.S. Department of Commerce, Bureau of the Census, 1980 Census of Population, Part 25, PC80-1-C25, Characteristics of the Population, General Social and Economic Characteristics: Minnesota, August, 1983.

Table 14. Marital history of persons 15 to 54 years of age in LeSueur and Nicollet counties, 1980.

	LeSueur		Nicollet	
	N	%	N	%
Number of Persons Ever Married	8,163	100.0	9,270	100.0
Number of Persons Never Widowed or Divorced	7,198	88.2	7,838	84.6
Number of Persons Divorced	813	10.0	1,234	13.3
Number of Persons Widowed	157	1.9	213	2.3

Source: U.S. Department of Commerce, Bureau of the Census, 1980 Census of Population, Part 25, PC80-1-C25, Characteristics of the Population, General Social and Economic Characteristics: Minnesota, August, 1983.

Table 15 indicates that the two counties were similar in family composition except for the female-headed households category. LeSueur County had a larger proportion of female-headed households than did Nicollet County. The proportion of female-headed households with children was substantial in both counties.

Community Services and Recreational Opportunities

Information regarding community services was obtained from "Community Profiles" produced by the Minnesota Department of Economic Development. Such information was available only for the communities of LeCenter and St. Peter and not for the smaller communities of Cleveland and Nicollet.

LeCenter had no hospital, but did have a nursing home with 110 beds. One doctor and three dentists served the community's health needs. The nearest hospital was in St. Peter, 14 miles away. The community had four Protestant churches and one Catholic parish, a public library with 5050 volumes, a nine unit motel, and two banks.

There were two private clubs located in LeCenter and four service organizations with a total membership of 450. The United Way was also active in the community, and had reached 105, 112, and 98 percent of quota in the three-year period between 1977 and 1979. LeCenter also had a local weekly newspaper.

Table 15. Families living with own children, LeSueur and Nicollet counties, 1980.

Family Type	LeSueur		Nicollet	
	N	%	N	%
Total Number of Families	4,902	100.0	2,268	100.0
With Own Children Under 18	2,683	54.7	1,292	57.0
With Own Children Under 6	1,292	26.4	609	26.9
Married Couple Families	4,409	90.0	2,111	93.1
With Own Children Under 18	2,428	55.1	1,224	58.0
With Own Children Under 6	1,200	27.2	589	27.9
Female-Headed Households	316	6.4	81	3.6
With Own Children Under 18	189	59.8	44	54.3
With Own Children Under 6	71	22.5	13	16.0

Source: U.S. Department of Commerce, Bureau of the Census, 1980 Census of Population, Part 25, PC80-1-C25, Characteristics of the Population, General Social and Economic Characteristics: Minnesota, August, 1983.

St. Peter had a 46-bed hospital and a 150-bed nursing home, eight doctors and six dentists that provided health service to the residents, ten Protestant churches and two Catholic parishes. There were also seven municipal parks and one state park, two swimming pools, twelve tennis courts and an eighteen hole golf course; one public library with 13,990 volumes and the library of Gustavus Adolphus college which was available to the public. A state institution for the mentally ill was also located in St. Peter.

The community of St. Peter had four banks as well as four private clubs and nine service organizations. The United Way was also active in St. Peter, attaining 90 and 100 percent of quota in 1978 and 1979, respectively. A weekly newspaper was also published there.

St. Peter had an airport providing charter services and railroad services, which were provided twice daily. A commercial airport was located 12 miles away in Mankato.

Agricultural Characteristics

Information regarding the agricultural industry of LeSueur and Nicollet counties is presented in Tables 16 through 19. Table 16 indicates that the number of farms in most categories decreased in both counties between 1969 and 1974. An exception to that trend occurred in the number of farms 1,000 acres and above. The number of farms in this category doubled in LeSueur County and tripled in Nicollet County. Another exception to the decrease trend was the 500-999 acres category in Nicollet County which had a 17.5 percent increase in number of farms.

Table 16 also shows that the farms in Nicollet County were, on the average, larger than farms in LeSueur County. Over half the farms in LeSueur County contained less than 179 acres, whereas the majority of farms in Nicollet County were 180 to 499 acres in size. LeSueur County, having smaller farms, also had more farms than Nicollet County.

Although farm size is typically a good indicator of the extensiveness of the agricultural industry of a particular area, cash income for farms reveals how successful the agriculture is. Table 17 displays the cash income of the farmers in Nicollet and LeSueur

BEST COPY AVAILABLE

counties during the years of 1975, 1977, and 1978. It can be seen that the totals for the various years tended to increase, and that Nicollet County consistently had a slightly higher income from both crop and livestock sales. The cash income for farmers in both counties was nearly evenly divided between crops and livestock. In comparing the data from Table 16 and Table 17 it is evident that, although Nicollet County had fewer farms than LeSueur County, it had a consistently larger cash income from agricultural sales.

Table 16. Size and number of farms in LeSueur and Nicollet counties, 1969 and 1974.

Acreage Categories	Number Of Farms			
	LeSueur		Nicollet	
	1969	1974	1969	1974
1 - 99 Acres	491	407	165	157
100 - 179 Acres	413	341	290	239
180 - 259 Acres	237	190	289	212
260 - 499 Acres	194	192	292	249
500 - 999 Acres	194	77	57	67
1000 Acres And Over	6	12	5	16
County Average	251	213	250	274
Total	1,397	1,219	1,098	940

Source: U.S. Department of Commerce, Bureau of the Census, 1974 Census of Agriculture, Vol. 1, Part 23, Minnesota State and County Data, April, 1977.

Table 17. Cash income in thousands of dollars received by farmers in LeSueur and Nicollet counties, 1975, 1977, 1979.

Income Source	LeSueur County			Nicollet County		
	1975	1977	1979	1975	1977	1979
Crops	21,104	25,971	28,811	27,343	30,174	33,441
Livestock	24,007	25,501	30,462	25,669	28,270	33,828
Government Payments	205	258	1,418	275	442	1,039
Total	45,316	51,730	60,691	53,287	58,886	68,308

Source: Minnesota Department of Agriculture, Minnesota Crop and Livestock Reporting Service, Minnesota Agricultural Statistics, 1978, 1979, 1980.

Table 18 reveals the yield data for various crops during the years of 1976 and 1979. This table reveals that Nicollet County farmers had more acreage planted to oats, soybeans, and corn each year than did their counterparts in LeSueur County and that the acreage of hay harvested in LeSueur County was higher than that for Nicollet County.

Table 18. Hay, oats, corn, and soybean production in LeSueur and Nicollet counties, 1976 and 1979.

Year and County	Crops			
	Hay (Tons)	Oats (Bu.)	Corn (Bu.)	Soybeans (Bu.)
LeSueur County				
1976				
Acreage Harvested	24,900	8,700	96,000	46,400
Yield Per Harvested Acre	3.4	54.3	73.2	28.5
1979				
Acreage Harvested	27,000	4,500	77,500	80,200
Yield Per Harvested Acre	3.4	71.0	116.0	37.5
Nicollet County				
1976				
Acreage Harvested	13,700	11,500	100,700	63,900
Yield Per Harvested Acre	3.4	58.8	71.3	27.9
1979				
Acreage Harvested	11,500	7,500	93,500	110,800
Yield Per Harvested Acre	3.3	68.0	112.0	36.0

Source: Minnesota Department of Agriculture, Minnesota Crop and Livestock Reporting Service, Minnesota Agricultural Statistics, 1978, 1979, 1980.

Table 19 shows that hogs were the most frequent type of livestock in this area. At least a portion of the large amount of corn and soybeans grown in the area became feed for these livestock. Cattle and calves were the second most frequent livestock type raised in LeSueur and Nicollet counties, reflecting the area's ability to produce large quantities of feed grains.

Table 19. Number of livestock by type in LeSueur and Nicollet counties, 1977, 1978, and 1979.

Livestock Type	LeSueur County			Nicollet County		
	1977	1978	1979	1977	1978	1979
Cattle And Calves	33,500	32,900	32,300	35,300	29,900	30,700
Sheep And Lambs	2,200	2,200	2,100	1,500	1,600	1,500
Hogs (including pig crop)	60,000	67,600	82,600	84,000	94,100	118,800
Milk Cows	9,200	9,300	8,800	9,100	8,400	8,900

Source: Minnesota Department of Agriculture, Minnesota Crop and Livestock Reporting Service, Minnesota Agricultural Statistics, 1978, 1979, 1980.

BEST COPY AVAILABLE

Summary

LeSueur and Nicollet counties were located approximately 60 miles south-southwest of the Twin Cities, in one of the most fertile agricultural areas in the state. The population of the area increased during the period reported at a rate approximately half that of the state average. This trend was expected to continue through the year 2000.

Social data indicate a very homogeneous population in terms of race with very little minority representation in the population. Small households and families and a low marital dissolution rate relative to the state and nation further characterized this setting. The educational level of the rural farm population was below that of the rural nonfarm population in Nicollet county.

Agriculture was a predominant industry in the area and was somewhat diversified. Hogs, cattle, and calves were primary livestock enterprises. Dairy was less prominent, although represented. Corn, soybeans, hay, and canning corn and peas were the principle crop enterprises. Average farm size was 200-250 acres. The data regarding educational, employment, and agricultural characteristics indicate that these two counties were relatively homogeneous.

Chapter III

SCHOOL DISTRICTS

While the preceding section provides a general overview of the communities associated with the Interdistrict Cooperative Center, this section focuses on the school districts involved in the center. Size, educational facilities, financial resources and expenditures, governance structures, management, staff (particularly instructional), curricula, scheduling practices, and student characteristics will be the major dimensions along which school districts will be described. Information regarding the St. Peter, Cleveland, and Nicollet school districts is more complete than that for LeCenter.

Data for Minnesota are presented alongside that for the four school districts wherever possible to provide a sense of the state context and to allow comparison of the districts with the state average. During the period for which the data are reported, the number of school districts in the state ranged from 422 to 434.

Interviews were conducted in March of 1980. Data not collected by interview were obtained from schools and state agencies for the previous school year (1978-1979). In cases where data summaries were not yet available for 1978-79, data from the years 1977 through 1978 were used. School district profile data, available from the Minnesota Department of Education for the years 1972 through 1980, were incorporated into the report to provide a picture of trends over time for each of the school districts.

Size

The four school districts varied in geographic size and enrollment. Table 20 compares the four school districts on the basis of the number of square miles included in each district. The Nicollet school district was the largest in the area, with 144 square miles. The next largest school district was St. Peter with 114.22 square miles, followed by LeCenter and Cleveland with 85.75 and 69.75 square miles respectively.

Table 20. Number of square miles in the St. Peter, Cleveland, LeCenter, and Nicollet school districts, 1980.

School District	Square Miles
St. Peter	114.22
Cleveland	69.75
LeCenter	85.75
Nicollet	144.0

Source: School district superintendents.

The size of each school district in terms of student enrollment is presented in Table 21 for the 1978-1979 school year. The data is presented in terms of average daily membership (ADM) and total pupil units. ADM is a head count of the students enrolled in a particular school district at a particular time. Students do not need to be in attendance to be counted in ADM, but they must be currently enrolled in the district. Total pupil

BEST COPY AVAILABLE

units is a weighted measurement of school district size. It is computed by applying weightings to the district's average daily membership (ADM). Each kindergarten ADM counts as .5 pupil units, each elementary ADM represents 1 pupil unit, and each high school student has a 1.4 pupil unit weighting. Both residents and nonresidents served by the district are included in the computation. Pupil units are intended to reflect the relative costs of educating students of different ages and are used in calculating state aid and tax levy limitation.

Table 21 indicates that St. Peter was the largest school participating in the vocational center with over 2,000 ADM. LeCenter was about half the size of St. Peter with 820 students, and Cleveland and Nicollet schools were similar in size with about 400 students each. Although the Nicollet school district was the largest in terms of geographic area (see Table 20), it had the fewest students of the four schools.

Table 21. Number of students enrolled in St. Peter, Cleveland, LeCenter, and Nicollet school districts on an average daily membership (ADM) or October 1 basis, 1978-1979.

Grade Level	School Districts							
	St. Peter		Cleveland		LeCenter		Nicollet	
	ADM	Total Pupil Unit	ADM	Total Pupil Unit	ADM	Total Pupil Unit	ADM	Total Pupil Unit
Kindergarten	139	69.5	38	17.5	43	21.5	31	15.5
Grades 1-6	759	759	198	198	335	335	131	131
Grades 7-12	1,144	1,601.6	196	274.4	442	618.8	228	319.2
Total	2,042	2,430.1	432	489.9	420	975.3	390	465.7

Source: Minnesota Department of Education, School District Profiles, 1979, 1980, 1981.

To determine the density of the student population, a ratio of the number of students to geographic area was calculated. This ratio gives an indication of the geographic concentration of students by indicating the number of students per square mile. The ratio is calculated by dividing the total number of pupils in the district by the total number of square miles in the district. Pupil density index data for the five school districts is shown in Table 22.

St. Peter had the largest number of students per square mile with 17.9; Nicollet had the lowest, with 2.7 per square mile. This suggests that students in the St. Peter school district lived in a more concentrated area than students in the Nicollet school district. Pupil density and the total number of pupils are factors in bus transportation patterns in a school district. Cleveland used six buses to transport students; Nicollet used eight and St. Peter, twenty-one.

Facilities

St. Peter had three elementary schools and one high school. The buildings ranged in age from 6 years to more than 30 years old. At the time of the interview no additions or rennovations were planned. In addition to the public schools, one private elementary school served 110 students in grades one through six. The Cleveland school facilities included the main building, which was over 30 years old, and three additions, one 28 years old, another 18 years old, and the third, less than five years old. Nicollet's school

Table 22. Pupil density index: Number of pupils (ADM) per square mile, 1978-1979.

School District	1978 - 79 ADM	Number Of Square Miles In School District	Pupil Density Index (ADM/No. Sq. Mi.)
St. Peter	2,042	114.22	17.9
Cleveland	432	69.75	6.2
LeCenter	820	85.75	9.6
Nicollet	390	144.0	2.7

facilities included a main building that was 31 years old and an addition that was 23 years old. A parochial school served some children in the community up to grade eight. LeCenter had one elementary and one secondary school.

Finances

The various sources from which the school districts obtained their revenues during the 1977-1978 school year are shown in Table 23. These sources include federal and state aid, local taxes, tuition, sales, and payments. Not included are proceeds from the sale of bonds and real property. The figures in Table 23 indicate the percentage of each district's total revenues obtained from three major sources.

Among districts, there may be wide variations in the percentage of revenue from each source. The percentage of revenue received by Minnesota schools in 1977-78 from the federal government ranged from 1 to 40 percent, from the state government, 12 to 86 percent, and from local sources, 3 to 86 per-cent. These variations are caused primarily by differences in property wealth among districts (e.g., districts with high property values tend to raise a higher percentage of their revenues through local taxes) and by differences in the amounts of revenue received from state and federal categorical aid programs.

The St. Peter, Cleveland, and LeCenter school districts received the greatest proportion (approximately half) of their revenues from the state while Nicollet received only 14% from this source. Nicollet received three-fourths of its revenue from local sources while the other three schools obtained two-fifths of their revenues locally. Nicollet received more federal dollars than did any of the other school districts and was above the state average in federal revenue received. The other three schools were similar to the state average in all categories of revenue received.

Table 23. Percentage of total revenues obtained from various sources, 1977-1978.

School District	1977 - 1978 Revenues		
	Federal	State	Local
St. Peter	3	58	39
Cleveland	5	52	43
LeCenter	4	58	38
Nicollet	10	14	76
Minnesota Average	6	52	42
Minnesota Median	6	56	39

Source: Minnesota Department of Education, School District Profiles, 1979, 1980, 1981.

BEST COPY AVAILABLE

The tax rates for the various school districts are shown in Table 24. The rates are described in terms of auditor and EARC mills, and are shown as dollars of tax per 1,000 dollars of property valuation. Auditor and EARC mills are measures of the burden of property taxes for school purposes in the year shown on the table.

Table 24. Tax rates for St. Peter, Cleveland, LeCenter, and Nicollet, 1977-1978.

School District	Tax Rates	
	Auditor Mills	EARC Mills
St. Peter	63.15	36.31
Cleveland	59.70	28.24
LeCenter	66.10	31.66
Nicollet	56.65	29.91
Minnesota Average	53.53	36.39
Minnesota Median	54.78	29.81

Source: Minnesota Department of Education, School District Profiles, 1979, 1980, 1981.

The auditor mills refer to the actual mill rate of school taxes on the assessed value of nonagricultural property, as determined by the county auditor. If, for example, the auditor mill rate is 50, then a property owner would be assessed $50 in school property taxes for each $1,000 of assessed value. Because of differences in assessment practices, comparisons of auditor mill rates among districts may not be valid. EARC mills refer to the mill rate of school taxes based on the districts' adjusted assessed value, as computed by the Equalization Aid Review Committee (EARC). In computing the adjusted assessed value, the EARC compensates for differences in assessment practices. Thus, it is valid to compare EARC mill rates among districts. EARC mills for the four districts were similar to each other and to the state mean and median.

Table 25 illustrates per-pupil expenditures for the participating school districts during the 1977-1978 school year. Sixteen categories are shown in which the various expenditures are divided. The first 12 categories are considered current expenditures, since they are incurred solely for the benefit of the current fiscal year. Each figure is rounded to the nearest dollar; each column includes total district expenditures for the indicated purpose minus reimbursement revenues received from other districts for the same purpose. Each expenditure category is defined below:

Administration -- salaries and other expenses of the school board, the superintendent, and other district-wide administrative personnel.

Instructional Salaries -- salaries of teachers, principals, consultants, coordinators, librarians, guidance and counseling personnel, psychologists, and other instructional resource personnel.

Other Instruction -- salaries of paraprofessionals, aides, secretaries and clerical personnel, textbooks, some library costs, audio-visual materials, instructional supplies, and all other expenses of instruction.

Attendance and Health -- salaries and other expenditures for attendance and health services, including contracted services.

Transportation -- transportation of pupils, including salaries, contracted services, insurance, fuel, vehicle maintenance, and other expenses.

Plant operation -- salaries, contracted services, fuel, utilities, supplies, and other expenses for the operation of the school plant.

Plant Maintenance -- salaries, contracted services, and other expenses for maintaining the school district plant and premises.

Fixed Charges -- fixed charges, including employee retirement contributions, insurance payments, rental of land and buildings, interest on loans, abatements, unemployment insurance costs, and severance pay.

Food Services -- food services salaries, food costs, and lunchroom supplies and equipment.

Student Activities -- all student activities over which the school board has assumed control.

Tuition -- total payments to other school districts for education of the district's resident pupils. This may include payments to vocational centers, special education cooperatives, or other schools in Minnesota or in other states.

Total Current Expenditures -- total current expenditures per pupil unit. This is a total of the eleven preceding categories of expenditures. It includes all expenditures incurred for the benefit of elementary and secondary education for the 1977-1978 school year, except for capital expenditures and debt service.

Community Services - recreation, civic activities, adult education, and other community services. In general, this category includes those community-oriented programs not directed toward regular elementary and secondary education.

Capital Equipment - equipment and all other capital items except for buildings and sites.

Buildings and Sites - expenditures for buildings and sites.

Debt Service - retirement of bonds and state loans.

The four participating schools follow close to the state average with a few exceptions. It may be noted that Nicollet varied from the state figure more often than the other three schools. Nicollet had considerably higher expenditures for other instructional costs, transportation costs, and total current expenditures than the other schools and the state average. Nicollet also had lower tuition cost and debt service than the other schools in the years shown. All schools had a lower cost for attendance and health services than the state average. The remaining categories were not significantly different from the state figures.

Governing Body

The Cleveland, LeCenter, and Nicollet school boards were composed of six members each. St. Peter's board had seven members. All boards held twelve regular meetings per year and, in addition, held a number of special meetings and negotiation meetings. Cleveland's board had four male and two female members. Occupations represented were farmer and business owner. Nicollet's board was of similar composition with regard to sex. Occupations represented were secretary, farmer, and business manager.

Staff

Table 26 shows administrative and teaching staff size for each school district for 1979-80. The data were obtained from questionnaires completed by the school district. No data for the LeCenter teaching staff were reported. The administrative and teaching staff

BEST COPY AVAILABLE

size in these schools reflects the enrollment relationships evident in Table 21. The teaching staff in Cleveland was described as having most teachers in a 22-35 age range with six to ten years of experience. Less than 10 percent of the Cleveland teachers were reported to have master's degrees. The majority of teachers in Nicollet and St. Peter were in the age range from 36-50; approximately 27 percent of the teaching staff in both schools had master's degrees. The majority of Nicollet's teachers were reported to have more than 11 years of experience.

Table 25. School district expenditures by accounting categories, 1977-1978.

School District	Expenditures/Pupil Unit								
	Admin	Instr. Salary	Other Instr.	Attnd & Health	Trans.	Plant Oper.	Plant Maint.	Fixed Charges	Food Serv.
Cleveland	67	666	59	0	87	99	6	90	96
LeCenter	45	741	81	6	82	114	6	95	66
Nicollet	88	836	271	6	207	122	22	90	85
St. Peter	53	800	170	4	91	141	15	86	57
MN Average	52	826	131	13	92	139	22	99	76
MN Median	63	746	107	4	103	127	15	85	82

School District	Expenditures/Pupil Unit						
	Student Activities	Tuition	Total Current Expenses	Community Services	Capital Equipment	Building & Sites	Debt Service
Cleveland	44	40	1,255	0	28	34	107
LeCenter	95	48	1,379	10	43	29	129
Nicollet	54	18	1,800	1	31	44	46
St. Peter	33	24	1,474	27	36	53	117
MN Average	34	22	1,505	29	37	94	194
MN Median	40	27	1,424	13	38	28	89

Source: Minnesota Department of Education, School District Profiles, 1979, 1980, 1981.

Table 26. Administrative and instructional staff, 1979-1980.

School District	Administrative Staff			Teaching Staff		
	K-6	7-12	Total	K-6	7-12	Total
Cleveland	1.5	1.5	3	12.5	17	29.5
LeCenter	1.5	1.5	3			
Nicollet	1.0	1.0	2	18	8	26
St. Peter	3.0	3.0	10*	68	68	136

*Includes four district-wide administrators.

Table 27 provides a picture of the ratio of full-time equivalent elementary and secondary professional staff (FTE) to students in the four districts. Professional staff includes administrators, classroom teachers, and all other licensed professional personnel. It can be seen that the pupil total/FTE ratios for the four school districts were similar to each other and slightly below the state average.

Table 27. Professional staff in relation to number of pupils, 1979-1980.

School District	Total Pupil Units	Total Staff FTE	Pupil Total/ FTE
Cleveland	453	31	14.5
LeCenter	796	52	15.3
Nicollet	385	30	12.8
St. Peter	1,933	140	13.7
MN Average			15.7

Source: Minnesota Department of Education, School District Profiles, 1979, 1980, 1981.

Scheduling and Courses Offered

Cleveland, Nicollet and St. Peter all had seven-period days. Cleveland and St. Peter had 55 minute periods; Nicollet's were 50 minutes long and LeCenter's were 56 minutes long. A full load for a teacher was six periods in Cleveland and Nicollet and seven periods in St. Peter.

Cleveland offered a total of 53 courses to students in grades 9-12. All students were required to take five subject areas. Ninth graders had four electives to choose from, tenth graders had five, and eleventh and twelfth graders had fourteen. Scheduling was done once a year but students were allowed to change their schedules for the second semester.

Nicollet offered 91 courses to students in grades 9-12. Ninth graders had 4 electives to choose from, tenth graders had 10, eleventh graders had 41, and twelfth graders had 43.

Data regarding schedules and courses offered at St. Peter and LeCenter high schools were not provided. St. Peter and Nicollet provided adult and community education courses. Cleveland residents participated in the St. Peter community education program through a special agreement between the school districts.

Students

Attendance rates for students in the four school districts were similar, ranging from a low of 94.1 to a high of 96.4 (Minnesota School District Profiles). (Attendance rate is the number of school days attended by all pupils during 1977-78 as a percent of the total days these pupils could have attended.) The percentage of students transported to school ranged from 76.8 percent at Nicollet to 52.4 percent at St. Peter (Minnesota School District Profiles). Cleveland and Nicollet school districts reported that more than 75 percent of their high school students participated in extra-curricular activities while St. Peter reported that about half of its high school students participated in extra-curricular activities.

Few minority students attended these schools. Minority student percents reported ranged from 2.1 to .5.

Cleveland reported that about 35 percent of its high school students had parents who were engaged in farming. Nicollet reported that the parents of 70 percent of its students were engaged in farming. Students were assisted with post-high school planning in their junior year in Cleveland and Nicollet. Students from these districts were encouraged to attend the annual college fair at nearby Mankato.

Activities of the 1979 Cleveland graduating class one year following graduation were reported as: attending a four-year college or university (25%), attending a two-year college (4.5%), attending a vocational school (28%), attending a business or computer training school (7%), military service (10%), farming or other agriculture-related employment (10%). Four and one-half percent of the students were married. One graduate was a parent.

For Nicollet, the following activities were reported for the 1979 graduating class one year following graduation: attending a four-year college or university (20%), attending a vocational school (27%), farming or other agriculture-related employment (27%). Ten percent of the students were reported to be married. Three students were parents. The majority of students were reported to remain in their home geographic area following graduation.

Summary

The four school districts had many similarities, although there were some differences. Nicollet had the largest geographic area and the smallest enrollment. St. Peter had the largest school enrollment having two and one-half times the enrollment of LeCenter and about five times the enrollment of Cleveland and Nicollet. Financially, the Cleveland, LeCenter, and St. Peter districts were generally similar to each other and to the state average. Nicollet differed from the others and from state average on several of the measures. The size of administrative and teaching staffs reflected enrollments. Staff to pupil ratios for the four districts were similar to each other and to the state average, although Nicollet's was slightly lower than the others. Cleveland's teaching staff was younger and more inexperienced than that of St. Peter and Nicollet.

BEST COPY AVAILABLE

CHAPTER IV

CENTRALIZED CENTER

The Interdistrict Center was chosen for this study to represent a cooperative, centralized secondary center form of educational delivery in sparsely populated rural areas. All programs in the center were housed in a single facility located in St. Peter, Minnesota.

History

The development of the Interdistrict Center began in 1972 with St. Peter, LeCenter, Cleveland, and Nicollet schools participating. As the Minnesota State Department of Education launched into a program of establishing secondary vocational centers, the superintendents of these schools looked for ways of cooperating in a center situation. The St. Peter schools, and particularly the superintendent, exercised major leadership in establishing the Interdistrict Secondary Center. The center director had been in his position for eight years and was the center's first and only director. The primary purpose of the center was described as giving students the opportunity to explore occupations. An evaluation of the center had been conducted by the state in 1978. The report of this evaluation described the purposes of the center as obtaining occupational skills and preparing for a job.

Governance, Management, and Legal Structure

The Interdistrict Center operated under Minnesota Laws, 1974, Chapter 252, which authorized cooperation by school districts to provide expanded vocational services and other educational services, and Minnesota Statute Section 471.59 which authorized member districts to jointly or cooperatively exercise any power common to the contracting parties.

The management and control of the Interdistrict Center was the responsibility of a governing board. Center governing boards are public corporations and agencies and may receive and disburse federal, state, and local funds. Center governing boards do not have the power to levy taxes or issue bonds. Each participating district may issue bonds for the purpose of acquisition and improvement of the center facilities. The board also has the power to set tuition rates for attendance in its programs by adults and nonmember secondary students.

The Interdistrict Cooperative Center governing board was composed of board members from each of the four participating districts. Board members were elected to terms of office by their local boards.

The center was required to have a supervising superintendent from one of the participating schools. This responsibility involved the signing of documents and supervision of the vocational center director.

The center director recruited and supervised staff, initiated curriculum, monitored the facilities, acted as a liaison with the State Department of Education, served as the vocational director of all vocational programs in the participating schools whether or not they were part of the center's offerings, monitored the licensing of all staff members, acted as the executive officer of the board and, in this capacity, made recommendations to the board. The governing board set policy, approved the budget, and provided direction to the program.

Member district superintendents served as an advisory body to the center director. They attended center board meetings but served in a nonvoting ex-officio capacity.

Facilities

In addition to facilities located in the St. Peter high school where the metals and electronics programs were taught, the center facilities consisted of a separate, self-contained 17,500 square foot building. The building was located on seven acres on the northern edge of St. Peter, approximately ten blocks from the St. Peter high school. The building housed the center programs and administrative offices and was used for community education classes and for center advisory committee meetings. The interior walls were movable and had been moved several times to accommodate program needs. The quality of this facility was very positively described in the 1978 state evaluation.

In looking to the future, it was reported that possible curricular expansion may necessitate additional facilities for programs in horticulture, sales and marketing, graphic communications, and possibly microcomputer equipment. Expansion considerations included increasing the space by 9,000 - 10,000 square feet for an office complex, three classrooms, and two shops.

Financing and Costs

The financing of the Interdistrict Center programs was determined on the basis of eleventh and twelfth grade enrollments in participating schools. Schools "bought into" the center. Once a school had committed financial resources to the center, the resources were not refunded to a school district if it decided to withdraw from the center. The center building was being acquired on a lease-own plan through which the center's rental payments on the building were applied as purchase payments. The per-pupil maintenance cost for the center was $675.

Size

There was a possible enrollment of 778 eligible students (i.e., juniors and seniors) from the four member districts. The vocational center had 225 students, or 29 percent of those eligible, enrolled in its programs. Enrollments in the center from each participating district were as follows: Cleveland (33), LeCenter (43), Nicollet (27), and St. Peter (122). Average class size at the center was 15 students. Center program enrollments are reported in Table 28.

An evaluation of the center in 1978 by the Minnesota Department of Education contained a recommendation for limited growth of the center in the future.

Staff

Experience of the center teaching staff ranged from a few years to many. Teachers were credited on salary schedules with years of work experience as well as teaching experience. Six teachers were employed part- or full-time by the center. In addition to teaching the center's secondary level courses, teachers taught in adult and community education programs offered by the participating school districts and served on various school district advisory committees.

Student-teacher ratios for center classes ranged from one to 12 or 15.

Scheduling and Curriculum

The curriculum of the Inter-District Center included the following programs:

1. Food Service Careers
2. Auto Mechanics (basic, advanced, and diesel engine power)
3. Building Trades
4. Health Services Occupations

5. Model Office
6. Vocational Metals
7. Vocational Electronics

Table 28. Enrollments in center courses, spring semester, 1980.

Program	Schedule and Enrollment			
	Block 1	Block 2	Block 3	Total
Basic Auto Mechanics	St. Peter (22)	Cleveland (7) Nicollet (8)	St. Peter (5) LeCenter (7)	49
Advanced Auto	Not Available	St. Peter (8) Cleveland (1) Nicollet (5)	St. Peter (12) LeCenter (3)	29
Building Trades	St. Peter (12)	Cleveland (7) Nicollet (9)	St. Peter (7) LeCenter (8)	43
Food Service	Not Available	St. Peter (9) Cleveland (3)	St. Peter (7) LeCenter (7)	26
Health Service	Not Available	St. Peter (6) Cleveland (7)	St. Peter (5) LeCenter (6)	24
Model Office	St. Peter (12)	St. Peter (7) Cleveland (3) Nicollet (5)	St. Peter (10) LeCenter (5)	42
Metals (offered at St. Peter High School)	Cleveland (3)	Cleveland (2)	LeCenter (7)	12

Source: Vocational Director.

No cooperative work programs were offered through the center at the time of the interviews. It was reported that these had been offered in the past but had been discontinued when laws governing their operation had changed. Such programs were offered by the individual school districts to their students. St. Peter offered three such programs and LeCenter and Nicollet each offered one. An agriculture mechanics program had been offered earlier in the center's history but had been discontinued.

Courses were a year or semester in length. Advanced auto mechanics and the diesel engine power courses required the basic automotive class as a prerequisite. Typing was a recommended prerequisite for model office.

All programs were located at the center's central facility in St. Peter with the exception of the metals and electronics courses which were offered at the St. Peter High School and made available to the students in the other three districts.

The school day was organized around three two-hour blocks. Block one covered the first two hours in the school day; block two ran from 10:15 a.m. to noon and block three was scheduled in the early afternooon right after lunch. Students from participating school districts were bused to the center for one of the block periods.

The courses were scheduled for two periods per day, five days per week. Programs were open to juniors and seniors although a few sophomores had been allowed to enroll.

It may be noted that each school was scheduled only for certain time blocks each day except St. Peter. St. Peter used all the time blocks each day because the center was located near the high school (although far enough away to require bus transportation). Cleveland and Nicollet were scheduled for block 2 and LeCenter, for block 3. A few Cleveland students attended the metals course during the first time block.

The courses were scheduled in the following manner:

Basic Automotive Mechanics - 2 credits
(Entry allowed either semester)

Advanced Automotive Mechanics - 1 credit
(Offered fall semester only - 18 weeks)

Diesel Engine Power - 1 credit
(Offered spring semester only - 18 weeks)

Building Trades - 2 credits
(Entry allowed either semester)

Food Service Careers - 2 credits
(Entry allowed either semester)

Health Service Occupations - 2 credits
(Entry allowed either semester)

Model Office - 2 credits
(Entry recommended for fall)
(One year of typing recommended)

Vocational Metals - 2 credits
(Entry allowed either semester)

Vocational Electronics
(Entry allowed fall semester only)

Curricular additions being considered at the time of the interview included horticulture, sales and marketing, and graphic communication.

In addition to vocational curricula, non-instructional services including career counseling and placement, Comprehensive Employment and Training Act (CETA)-related services, and school psychological services were available to member districts through the center.

Transportation

All students were transported by bus to the Interdistrict Center. Cleveland and LeCenter had tried sharing transportation but this had proved to be too restrictive. A map of the community locations and the distances between them is presented in Figure 3 (see Figure 3 in Chapter II). The distance between St. Peter and LeCenter was 12 miles as was the distance between St. Peter and Nicollet. One-way transportation times reported were 11 to 15 minutes for the furthest districts. Part of lunch hour was used for transportation thus reducing the scheduled class time missed by students in their home schools.

Students

Students were required to be either juniors or seniors to be eligible to enroll in the Interdistrict Center programs, although a few sophomores had been allowed to enroll where space was available. Students reported that they took courses in the center because they were interested in a particular area and wanted to develop skills and/or explore potential careers. Teachers indicated that students were getting career direction help. It was

reported that some center students who entered post-secondary vocational schools were able to complete their training in a shorter period of time.

Where students from more than one school enrolled in a program, Cleveland, LeCenter, and/or St. Peter students were likely to be enrolled together, and Nicollet and St. Peter students were likely to be enrolled together. Some persons interviewed indicated that students from each community tended to interact amongst themselves and to avoid mingling with students from other communities.

Most students completed their programs. In 1979-80, 28 students did not complete the center offerings. Of these, 14 dropped out of school. Students who dropped out of center programs tended to fall into two categories: students who were insufficiently prepared and students who had inaccurate expectations regarding a program. Students also changed from one program to another periodically.

Perceptions of School Personnel and Community Members

Perceptions were generally positive about the center's programs. It was stated that there was a need to set a direction for the center and to help others understand what was being accomplished in the center. One school official suggested that futuristic areas such as solar technology, alternative energy forms, and computer mechanics should be considered for future programs. Another school official indicated that the center provided an alternative to dropping elective courses in small schools. He saw a potential for extending the sharing concept embodied in the center to include advanced academic elective courses such as advanced math, foreign language, and business courses such as shorthand. He also identified the possibility of having a teacher travel between several schools to teach these courses. Another official saw the center as providing new interest in school for potential dropouts and as developing lifelong interests in students who may or may not pursue these in a career.

Some school officials reported that the vocational center had helped to solidify the strong feelings school districts had about maintaining the local districts versus moving to some combined organization. The center was perceived as offering courses that the individual schools could not include in their curricula and, at the same time, helping to preserve the school districts as independent entities. One school official said that the center was an asset to the educational system and his school district and was adequate in size and programs for the rural communities it served.

It was reported that communication between the center and the individual school districts as a whole had been limited and that teachers in the participating districts were not very knowledgeable about center curricula. Interviews with teachers in participating districts and the 1978 evaluation report all revealed similar observations. Some officials reported that when the center had started, school district teachers were apprehensive about the impact of the center on enrollments in their classes but that these feelings had diminished. (One school official cited declining enrollments as presenting a continual challenge to keeping all curricular offerings going.) One school had run an article on the vocational center in their newsletter to inform the local school and community about the center.

A counselor from one of the participating districts saw the center as offering students learning experiences in three different categories: 1) communication, 2) manipulative skills, and 3) quantitative operations. One school staff member felt that the center staff sometimes forgot the exploration dimension and functioned instead like a post-secondary AVTI. Administrators, school teaching personnel, and residents indicated that particular advantages available to students enrolled in center programs were seen as an expansion of opportunities to gain wider experiences and to work with others.

Interviews with parents and community members from the participating school districts revealed perceptions that the center had either increased the citizens' control over the school programs or had not affected it. Some, but not all, indicated that they thought the center had increased their taxes. Positive aspects of the center, as seen by parents,

included the opportunity for students to try occupations, to be in a job-like atmosphere, to feel like adults, and to determine whether or not they like the career they have temporarily planned. Parents indicated that they perceived the wages of center teachers as high and were concerned about the legal aspects of student employment in connection with center programs (e.g., unemployment eligibility).

A teacher from one of the school districts saw the advantages of the center as providing students with work experience or simulated work experience, new educational opportunities, and opportunities to meet students from other communities. This teacher saw the emphasis placed on career in a center-type curriculum as positive. The same teacher expressed concern about the potential impact of the center on school district curricula and teaching staffs. Other teachers saw the center as expanding the school curricula, allowing teachers to specialize, and providing students with more specific and advanced skills through specialized teachers and facilities.

Perceptions of community members and school district teachers were generally characterized by little knowledge about the center. Those teachers interviewed indicated that they had little communication with center staff. Suggestions for addressing this problem included the use of media, direct contact between center staff and the public and school district instructional staffs, and cooperative work experiences for students out in the community.

A center teacher saw advantages of the center as including giving students a career direction and helping them to decide what to pursue what not to pursue, providing a stepping stone for further training, and arousing curiosity and interest in exploring a new area or field. This teacher referred to some students as seeing the center as a place to "goof off" or "while away" time. The sharing of program costs by school districts, as exemplified by the vocational center, was seen by this teacher as analogous to the sharing of equipment by farmers and businesses.

Student perceptions of positive aspects of the vocational center included working with others, getting two credits for one class, learning useful things, learning to do things on one's own and to be relied upon and to take responsibility, gaining advanced learning not available on the job, learning about problems in the real world, learning which careers are appealing and which are not, and working with one's hands. Disadvantages of the center were seen by students interviewed as including a short lunch hour, the bus ride to the center, uninterested students who sometimes "mess it it up" for others, being away from one's home school, and scheduling conflicts with other classes. Teachers from the school districts mentioned travel time and less personal contact with students and their families as a disadvantage in the center approach.

Students indicated they missed pep fests, class meetings, home economics courses, speech contests, and shop in their home schools. These students felt that what was missed was less important to them than the vocational course in the center.

Summary

The Interdistrict Cooperative Center was in a stable period of existence. Its eight years of serving the school districts of St. Peter, LeCenter, Nicollet, and Cleveland had put it beyond an initial development period and into one of maintenance, refinement, and revision. During its eight years of existence it had experienced changes in the funding formula and the curriculum. The movable walls in the center building provided flexibility. While LeCenter, Cleveland, and Nicollet students were scheduled in a specific two-hour time block, St. Peter students were scattered throughout the day where space was available. This was possible because of the center's location in St. Peter. The center structure, facilities, or staff were also used to provide nonvocational specialized services to the school districts and continuing education classes to adults in the communities. The communities were located relatively close together.

While many students were reported to be seriously interested in their vocational center classes, a relatively large proportion of students with serious behavior problems were reported to have enrolled.

The center was viewed positively by participating school officials and community members who were informed about it. In general, community members, parents, and teachers in participating school districts appeared to have little knowledge about the center. Some tendency for school district teachers to be concerned about the center drawing students from their classes was evident, although it was reported that this concern had decreased with time and experience with the center.

CHAPTER V

CONSUMER HOMEMAKING PROGRAM

All four districts offered a home economics program. This is a brief summary of the consumer homemaking programs offered at Nicollet, LeCenter, and St. Peter school districts. These programs were not offered by the Interdistrict Cooperative Center, but rather were provided and administered by each individual school district. The teachers in these programs knew of the inter-district vocational-technical education programs but otherwise had limited association with the vocational center. Cleveland's program was not a vocational program. The other three schools had vocational consumer homemaking programs. The center's vocational director served as the vocational director for the home economics programs and teachers in the school districts with vocational home economics programs. This role involved signing documents, completing reports, and recommending programs and teachers for vocational approval by the state.

Size

The enrollments of the consumer home economics programs in the three schools are summarized in Table 29. The enrollments listed are for the 1978-1979 school year. It should be noted that both males and females enrolled in the consumer home economics programs.

Table 29. Number of students enrolled in the consumer homemaking program, grades 7-12, at Nicollet, LeCenter, St. Peter, 1978-1979 and Cleveland, 1979-1980.

School District	Enrollment		
	Male	Female	Total
Nicollet	32	117	149
LeCenter	60	130	190
St. Peter	50	169	219
Cleveland	16	73	89

Source: School District Superintendents.

Facilities and Equipment

The teaching facilities for consumer home economics varied for each of the three schools. The facilities for two of the schools were located in new structures. The home economics facilities in a third school were located in an old section of the school and in need of remodeling and modernization. In the fourth school, lack of space was reported by the teacher as a concern. Three of the teachers expressed a need for newer models of some types of equipment. Equipment in all situations was adequate and replacement needs were reported by the teachers to be taken care of satisfactorily. An efficiency problem experienced by rural school home economics programs was identified as the use of certain equipment items (e.g., food storage and preparation equipment, clothing production equipment) only part of the school day or year.

BEST COPY AVAILABLE

Finances

Budgets for the consumer homemaking programs in LeCenter, Nicollet, and St. Peter for the 1979 and 1980 school year are shown in Table 30. Generally, it was reported that the financing of the programs had not presented any problems. However, concern was expressed by the teachers that financing could become a problem in the future.

Table 30. Consumer homemaking program budgets for LeCenter, Nicollet, and St. Peter Public Schools, 1979-80.[1]

School And Budget Categories	Amount Budgeted 1979-80
LeCenter	
Licensed Salaries	16,081
Travel	0
Equipment	0
Net Budget	16,081
Nicollet	
Licensed Salaries	11,300
Travel	200
Equipment	625
Net Budget	12,125
St. Peter	
Licensed Salaries	13,037
Travel	0
Equipment	0
Net Budget	13,037

Source: School District Superintendents.
[1]Budget information for Cleveland was not available.

Management

The consumer homemaking program in each school appeared to be well-managed. The facilities were kept orderly and well-maintained. The programs appeared to be attracting students at a reasonable level.

Staff

The consumer homemaking teacher at Nicollet taught five different classes per day, and had one study hall and one preparation period. Each period was 50 minutes in length. The teacher also served as the Future Homemakers of America (FHA) adviser and the junior class prom adviser. She was not involved in the adult home economics program. She was employed on a nine-month contract with four days of extended employment per year. She was considered to be on vocational time for four-fifths of her assignment. The other fifth of her time was devoted to nonvocational seventh and eighth grade home economics.

BEST COPY AVAILABLE

The home economics teacher at Cleveland was also employed nine months. Like the Nicollet teacher, the Cleveland teacher served as the FHA adviser and did not teach courses for community adults. Her seven-period day consisted of teaching five different home economics courses, one study hall, and one preparation period. No information regarding the LeCenter and St. Peter staff was available.

Materials

Teaching materials were considered adequate by the three teachers involved. Replacement and acquisition of new materials was not considered a major problem but future financing difficulties were anticipated. Textbooks were identified as a problem because home economics texts become outdated quickly and are sometimes not used extensively.

Scheduling and Curriculum

The Consumer Homemaking Program at Nicollet offered quarter-long courses in home economics at the seventh and eighth grade levels. The senior high program offered two-semester sequences of family life, foods, and clothing each year. In addition, semester offerings of housing, child development, and consumer education were available at least every other year and usually every year. These offerings were available to tenth graders or to eleventh and twelfth graders. Home economics was not available to ninth graders.

In LeCenter, the consumer homemaking courses were offered on a semester basis, with year-long courses offered in clothing, foods, and applied design. Semester courses included singles' foods, fashion clothing, consumer economics, and others.

The consumer home economics program at St. Peter also operated on a semester basis. This included courses in consumer education, clothing, child development, and self-understanding. The vocationally approved program was available to students in grades 10 through 12.

In planning programs, teachers indicated that the purpose of a consumer home economics program was wide-ranging. The major objectives noted included: 1) preparation of students to work in the home and/or as a wage earner by teaching them the basic skills in food preparation, clothing construction, home decorating, and child care, 2) providing career exploration, 3) increasing consumer skills by including consumer education as part of all units taught, and 4) serving disadvantaged as well as advantaged students.

It also appeared that community values, norms, and conditions represented a heavy influence on the curriculum planned by the three vocational teachers; other factors included available resources, teacher expertise, and instructor interest. The non-vocational teacher reported being influenced most by students' interest and the students' future plans for lifelong work.

In Cleveland, seventh grade students were offered a course called "Teen Homemaking"; eighth graders took a course called "Creative Living," and ninth graders, a course called "World of Food". During their junior and senior years, students had the option of taking one semester courses in "Textiles and Tailoring", "Housing and Decorating", or art.

None of the participating schools offered occupational home economics courses although the basic skills taught in the consumer home economics courses were seen as applicable to work settings and as a useful prerequisite for the food service program offered through the center.

Students

Discipline was not mentioned as a problem by the home economics teachers. It was consistently pointed out that many students in rural schools participate in a broad range of school activities and, in addition, are employed part time. This pattern was reported by

home economics teachers to affect participation in FHA. Teachers also reported that students were interested in learning, seemed to have specific goals and know where they are headed.

It was reported that 50 percent of the students enrolled in home economics in Cleveland were FHA members. A similar proportion of these students lived on farms. Most home economics students enrolled in more than one home economics course during their school experience in grades seven through twelve. Sixteen (nine males and seven females) of the forty-three 1979 graduates had enrolled in the advanced home economics course as juniors or seniors. One year after graduation, four of the males were in college, one was attending vocational school, two were in the military, and two were working full time. Of the females, four were married, two were working, and one was in college.

A cross section of students was reported to have enrolled in home economics courses. One counselor stated that college-bound students used home economics courses as a source of general information and as a guide to future parental roles. Enrollment in food and nutrition and textiles courses was primarily comprised of females while consumer education, family living, and child development courses were comprised of both males and females.

Students enrolled in home economics courses saw the courses as helpful to them in the future, as containing interesting subject matter, as pertaining to economic principles and functions, and as a place to learn skills relevant to the establishment and maintenance of a home.

Summary

All four schools in the Interdistrict Cooperative Center had a consumer home economics program. St. Peter's, Nicollet's, and LeCenter's programs were vocational programs and had been part of the school curriculums for many years. In each case the program attempted to meet the immediate needs of the community and students by offering a variety of standard consumer-related courses. The courses were semester or quarter length and were typically offered to seventh through twelfth grade students.

Teachers considered community attitudes and needs, student interests and needs, and their own professional strengths and interests as instrumental in developing their course offerings. The teachers did not appear to feel threatened by the occupational foods program or other programs offered at the center. There did not seem to be a close connection between the school district home economics programs and the center foods occupations program nor did the teachers appear to have much information about the center.

BEST COPY AVAILABLE

CHAPTER VI

OCCUPATIONAL HOME ECONOMICS PROGRAM

The Occupational Home Economics Program had been offered as part of the Interdistrict Vocational Center curriculum for seven years. The program's major emphasis was on food service careers involving quantity food preparation. The students approached food preparation from the industry's viewpoint and became involved in the serving and business aspects of the food service industry. Four teachers had been employed as instructors in the program's history.

Size

The food service program had a 1979-1980 enrollment of 30 students including 27 junior students and 3 seniors. Twenty-six of the students enrolled were female.

Facilities and Equipment

The commercial food preparation space in the center was not originally designed for a foods occupations program. Consequently, equipment had been added and "fitted into" the existing space. While most aspects of the facility adaptation had been adequate, a carpeted floor was a major problem in terms of cleanliness and sanitation. Consequently, future plans were to replace the carpeting with hard surface flooring. Most major equipment items were available but future plans included the addition of a cash register, a steam cooker, and a food cooling cart.

Finances

The budget for the 1979-80 school year for the food service program was $10,456 and included $8,226 in salaries, $200 in travel, and $1,830 for equipment.

Management

An observation of the program in operation revealed a situation that was well-organized and orderly. The two prominent difficulties cited in administering the course were late arrival of students due to late bus arrivals, and student discipline in some sections. Areas cited as positive aspects of teaching the course included student interest in learning, goal-oriented students, community support, and adequate teaching resources.

Staff

The food service instructor was employed on a two-thirds time, nine-month contract. Her responsibilities were entirely on the secondary level, and she taught periods three through six, a total of four periods each day. She also was advisor for the local chapter of the HEART Club.

Materials

The teaching materials available were described as adequate. The teacher had made plans regarding the future acquisition of textbooks and audio-visual materials with an emphasis on slides and filmstrips.

Scheduling and Curriculum

Curricular units included in the fall semester of the program were introduction to food service occupations, sanitation, beverages, safety, equipment, quick breads, weights and measures, salads, fruits, vegetables, personal organization, yeast breads, cashiering, fall food restaurant, sauces, and soups. Spring semester units include sandwiches, purchasing, receiving, storage and inventory, cookies, cakes and icings, pastries, service and dining room (waiter/waitressing), egg and dairy food product production, meat, fish and poultry, job observation, scheduling, keeping records, spring food restaurant, and human relations and job applications. The fall and spring restaurant units involved a simulated restaurant experience in which food was served to clients in the school and community. Major influences on curriculum decisions were identified as the types of industry and business represented in the community, student interests, instructor knowledge, advisory committees and students' plans for life-long work.

Future plans or goals regarding curriculum included adding a unit dealing with "Food Service and the Media," and changing the sanitation unit to make it more interesting. This would be accomplished by condensing present units to make room in the curriculum for additions. A valentine cookie money-raising project was described as successful in its goal of producing income for the HEART Club and as enlightening students in terms of what the occupation and business of a baker might be like.

Students

Nearly all of the students enrolled in the food service program had previously taken other home economics courses. The teacher noted that this experience was extremely helpful in studying food service. The students also noted the advantages of the food service program at the vocational center as helping them formulate their career direction and aspirations, providing a stepping stone to further educational training, and spuring interest in exploring a new occupational area. The teacher specifically mentioned three students whose careers followed through on their interest in food service, one in airline flight training, one in ship-board food service, and one in gourmet cooking.

The rate of participation in the HEART Club was relatively low with only seven dues-paying students as members, even though club activities were carried out in class.

Perceptions of School Personnel and Community Members

The food service program had an advisory committee which met twice per year. Eleven committee members included a food service coordinator for the Minnesota Gas Company, two representatives from the Mankato Area Vocational Technical Institute (food service and baking program instructors), the chief cook from the St. Peter State Hospital, a student, a community-at-large representative, and representatives from the Holiday House Restaurant and Club, the St. Peter High School Food Service, the St. Peter Herald, a delicatessen located in St. Peter, and a St. Peter nursing home food service. Two of the committee members were interviewed. These individuals indicated that they thought the foods occupations program had contributed to the geographic area, had given students an outlet for productive use of time and a greater interest in school, and had prepared noncollege-bound students to get a job. A closer relationship between the school and the community was also cited.

Providing training sites for students was seen as an important function of the community. It was felt that participating communities in the center were not informed about what was going on at the center. A possible reason for this might have been that all members of the committee appeared to come from St. Peter or Mankato. Producing quality food service personnel, expanding student horizons, and developing individual uniqueness were seen as significant functions of the program. The restaurant portion of the program was seen as providing students with an opportunity to gain job experience. Observation experiences in job sites were viewed as providing students an opportunity to compare their own performance with industry standards and requirements. Personnel for fast food establishments was seen as a priority need. On the other hand, chefs were reported to be in good supply in the area.

BEST COPY AVAILABLE

Problems cited in connection with the foods occupations program were numerous staff changes, difficulty in finding qualified instructors, and lack of state guidelines for developing such programs at the time the program had been initiated.

Summary

Thirty students were enrolled in the Interdistrict Cooperative Center's food service program. Of those 30, 26 were females and 4 were males, 3 were high school seniors and the remaining 27 were juniors.

The adapted facilities functioned reasonably well with the exception of a few inadequacies. A simulated restaurant experience provided students with industry-related experience.

Students considered the program especially valuable in determining future career goals, and in pursuing careers in the food industry. Most students had taken consumer home economics courses in their home schools prior to enrolling in the center.

CHAPTER VII

VOCATIONAL AGRICULTURE PROGRAM

Three of the four schools participating in the Interdistrict Cooperative Center offered vocational agriculture. An agricultural mechanics program had previously been offered through the center but at the time of the interviews vocational agriculture was not included in the center's curriculum. A horticulture program was being considered as a future addition to the center curriculum. The center director served as the vocational director for the agriculture teachers in the three school districts. This section is a brief description of vocational agriculture programs in the school districts of St. Peter, Nicollet, and LeCenter. Cleveland had offered an agriculture program but discontinued it in 1970 when an industrial arts program was initiated.

Size

Table 31 shows the number of students enrolled in the various agriculture course offerings in each of the schools. A very small percentage of females enrolled in the agriculture classes. The LeCenter programs enrolled the most females with seven taking a horticulture class. Nicollet had two females enrolled in production agriculture, and St. Peter had no females enrolled in agriculture courses. The table also shows that the main agricultural emphasis of the area was on production agriculture, with each school offering that type of curriculum.

Table 31. Number of students enrolled in the vocational agriculture program at St. Peter, Nicollet, and LeCenter, 1979-80.

School District And Course Title	Male	Female	Total
St. Peter			
Natural Resources	12	0	12
Agricultural Mechanics	20	0	20
Production Agriculture	72	0	72
Total	104	0	104
Nicollet			
Production Agriculture	63	2	65
Total	63	2	65
LeCenter			
Production Agriculture	54	0	54
Horticulture	10	7	17
Agricultural Mechanics	32	0	32
Total	96	7	103

Source: Agriculture Teachers.

BEST COPY AVAILABLE

Facilities And Equipment

The vocational agriculture department at St. Peter had about 600 square feet in the class-room, 120 square feet in the office area, 120 square feet in the laboratory area, and 2,400 square feet in the shop area. The facilities were located within the St. Peter high school. The facilities at LeCenter consisted of about 900 square feet in the classroom, 120 square feet in the general laboratory, about 3,000 square feet in the shop area, and about 325 square feet in the indoor green-house area.

Future plans for equipment in the St. Peter program included the addition of small equipment, tools, and some major machines in the agricultural mechanics area. The LeCenter teacher felt that he would aim to maintain the present equipment. Data were not available for Nicollet.

Finances

Table 32 shows the amount of money budgeted for the various vocational agriculture programs in the three schools. Total net budgets for St. Peter, Nicollet, and LeCenter were $13,555, $19,772, and $20,516 respectively. Travel and instructional/administrative allotments ranged from $1,200 to $1,500.

Table 32. Secondary vocational agriculture program budgets for St. Peter, Nicollet, and LeCenter public schools for the 1979-80 school year.

School And Budget Categories	Production Ag	Natural Resources	Ag Mechanics	Total
St. Peter				
Licensed Salaries	8,967	789	789	10,545
Travel	1,200	0	0	1,200
Equipment	0	0	1,810	1,810
Net Budget	10,167	789	2,599	13,555
Nicollet				
Licensed Salaries	14,268	-	-	14,268
Travel	1,400	-	-	1,400
Supplies For Resale	4,104	-	-	4,104
Net Budget	19,772	-	-	19,772
LeCenter		Horticulture		
Licensed Salaries	11,547	1,328	5,311	18,186
Travel	1,500	0	0	1,500
Equipment	0	0	850	850
Net Budget	13,047	1,328	6,161	20,516

Source: School District Superintendents.

Management

Student discipline was reported to be a challenge to some extent but it was not described as a serious problem. Lack of teaching resources in some curricular areas was another problem encountered by teachers.

Staff

The vocational agriculture teacher at St. Peter had five preparations each day involving six periods of the school day.

The high school vo-ag teacher at LeCenter had five preparations involving five periods per day. All three teachers were employed on a twelve month contract and devoted 100 percent of their time to the vocational agriculture program. In addition, the vocational agriculture teachers at both St. Peter and LeCenter advised very active FFA chapters.

Materials

The teaching materials available in each of the programs were described as very adequate. Each course was well-supplied with reference books, bulletins, periodicals, and all types of audio-visual aids. The teacher at St. Peter indicated that to meet the needs of planned changes, additional materials would have to be acquired in the future.

Scheduling and Curriculum

The vocational agriculture programs at LeCenter and St. Peter offered students a comprehensive agriculture program over a four year period. The LeCenter program offered a combination of year-long and semester-length courses. The St. Peter program was developed around year-long courses for each grade level. In both schools, ninth grade students received a year-long course called "Exploring Agricultural Occupations." In the St. Peter program the major emphasis at the tenth grade level was on soils and animal science. At LeCenter, the main emphasis was on livestock science. At the eleventh grade level at St. Peter, crops and arc and oxyacetylene welding received major emphasis; at LeCenter agricultural shop skills were the focus. The twelfth grade level course at St. Peter focused on farm management, animal science, and agricultural mechanics. The program for twelfth graders at LeCenter included advanced levels of crops, livestock, and farm management.

St. Peter provided a two-hour per day cooperative education experience for twelfth graders. The LeCenter program provided a semester of horticulture and a semester of power and equipment (small gas engines) for students in grades ten through twelve. Students' supervised occupational experience programs, and students' future plans for lifelong work were reported by the agriculture teachers to have the greatest influence on their curriculum decisions. Data was not available for Nicollet.

Students

In general, the students that were enrolled in the vocational agriculture programs at St. Peter and LeCenter were from farms. Students raised on farms comprised 70 percent of those enrolled in vocational agriculture at St. Peter and 100 percent of those enrolled in vocational agriculture at LeCenter. The Nicollet counselor indicated that a cross section of types of students enrolled in the Nicollet vocational agriculture program. FFA membership was also very strong in these two schools, with 100 percent of the vocational agriculture students in St. Peter participating in FFA and 85 percent, participating at LeCenter.

Regarding future plans, the majority of students planned either to attend a post-secondary vocational school or to enter farming. A few students were interested in attending a college or university or in entering nonagricultural occupations. Students indicated they enrolled in high school agriculture classes because they were currently farmers, to learn general agricultural practices, to develop their leadership potential, and because they planned a career in agriculture.

Perceptions of School Personnel and Community Members

Advisory committees for the St. Peter and LeCenter agriculture programs were comprised of farmers, agribusiness representatives, parents, counselors, school board members, county agents, school administrators, and other teachers. Adult agriculture instruction was available to school district residents either through a program offered by the school district or through a regional veteran's program.

Parents who were interviewed thought agriculture was an important subject for students to learn how to manage an agricultural enterprise.

Two school officials indicated that an agriculture program in the center was considered from time to time but that it would be difficult not to duplicate the programs in the three schools.

Summary

Three of the four schools cooperating in the Interdistrict Cooperative Center offered vocational agriculture. Because of this, vocational agriculture was not included in the center's curriculum. The primary emphasis of the vocational agriculture programs was in the area of production agriculture. Few females enrolled in vocational agriculture courses. A large majority of the students come from a farming background and most planned to remain in an agricultural occupation following high school graduation.

CHAPTER VIII

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents a summary of the data relevant to each question posed in the case study design. Conclusions and recommendations regarding the centralized center are also presented.

The centralized secondary center pattern of inter-school district cooperation as represented by the Interdistrict Center includes a center governance structure, a designated curriculum of courses associated with the center, a center administrative staff, a center teaching staff, a center budget and financing system, teaching materials and equipment that are owned or rented by the center, and facilities located in one community but owned or rented by the center. The center has an identity and is an additional structure separate from but also related to the member school districts. A summary of the data associated with each of the questions that guided the case study is presented below.

Summary

1. What are the essential features of the centralized center?

   a. Governance
      --Center structure separate from, but related to, member school districts
      --Center board
          Each member district represented on center board
          Regular board meetings
          Makes center policy, owns/rents center facilities, is legal fiscal agent with power to accept and disperse public funds; does not have the power to levy bonds; hires staff
      --Advisory board composed of superintendents of all member districts
          Advisory to center board
          Meets separately from board
          Members attend center board meetings, ex-officio
      --Vocational director responsible for center management; reports to center governing board and to supervising superintendent
      --One member school district superintendent designated as supervising superintendent
          Authorizes documents
          Supervises vocational director
      --Joint powers law and vocational center legislation is legal basis
   b. Funding and budgets
      --Center has its own budget
      --Center is a legal fiscal agent
      --Center receives state vocational aids
      --Center assesses participating school districts to cover its costs
   c. Staff
      --Staff are employees of center
      --Staff includes a vocational director, center program instructors, and support staff including secretarial, and maintenance personnel
   d. Services provided
      --Vocational programs offered by the center to students in member school districts
   e. Facilities
      --All center facilities located in one community
      --Center-owned or rented space housing programs and administrative and clerical offices

2. How does the centralized center work?

   a. Financing, costs, and cost distribution
      --Funding formula allocates shared costs to school districts (formula variables for the Interdistrict Cooperative Center case included eleventh and twelfth grade enrollments in member schools and center usage by each school; approximate total annual cost: $150,000; 1978-79 center per-pupil maintenance cost: $675)
      --Transportation costs involved for all (or all but one) member school districts
      --School districts are partner-owners of center and share capital, as well as operating costs
   b. Scheduling
      --Two-hour courses scheduled in the center each day (three two-hour periods scheduled throughout day in Interdistrict Cooperative Center case)
      --Semester- and/or year-long courses offered
      --Each school district has its own time slot in the day if student numbers are sufficient
   c. Transportation
      --Students are program element transported between communities
      --Students from all (or all but one) member schools are transported
      --School buses used to transport students
      --School districts generally make one round trip to center each day, five days a week. School(s) located very near center may make multiple round trips to center daily.
      --Time required for round-trip travel for farthest district: 22 to 30 minutes
      --Longest one-way travel distance from a school district to the center: 12 miles
   d. Students enrolled
      --Students eligible for enrollment in center courses are eleventh and twelfth graders in member school districts
      --High proportion of students exhibiting behavior problems

3. How does the centralized center fit with the characteristics of the setting?

   a. Member schools have small enrollments; one school may be somewhat larger than the others (total school enrollments on an ADM basis for participating districts in the Interdistrict case ranged from 390 to 2,042 in 1978-79).
   b. Geographic territory served by the centralized center
      --500 sq. mi. or less (414 sq. mi. in Interdistrict case)
      --Number of students per square mile
        --2.7 in least densely populated school district
        --17.9 in most densely populated school district
      --Distances between participating communities range from 5-24 miles

4. What consequences related to educational access and quality are apparent?
   a. Quality
      --Strengths
        1. Facilities newly constructed to desired specifications
        2. Responsibility for administrative leadership and functions clearly vested in vocational director; continuity in leadership across programs and across time
        3. Center subject to state regulations which impose a level of quality
        4. Continuity in programs and staff over time
        5. Staff specialization likely
        6. Advisory committees connected with center and its programs provide opportunity for school-community interaction.
      --Weaknesses
        1. Student vocational organization is difficult to maintain when students must travel to meetings and identify with an organization other than their school
        2. Center faculty has limited opportunity to get acquainted with faculty and students from all the schools involved in the center and to be directly exposed to the culture and characteristics of each community, school district, and student body

BEST COPY AVAILABLE

b. Access
   --Strengths
   1. Students in member districts have access to a range of vocational programs that would not have otherwise been available to them.
   2. The total number of programs available to students in all member districts is increased.
   3. Few school district programs dropped or duplicated.
   --Weaknesses
   1. Students in most member school districts may give up access to some offering in their home school due to travel time.
   2. Access requires travel for students.
   3. Access to programs is distributed unequally among all participating districts.

5. How might the centralized center be modified?

   a. Video tapes, closed circuit television, or other means of remote educational delivery could be used on some days to reduce the number of days students must travel.
   b. Length of center classes could be reduced from two hours to one.
   c. Center classes could be scheduled at beginning or end of school day to minimize school day time used for travel.
   d. Scheduling conflicts for students may be reduced by a slightly longer school day.

Conclusions

The centralized center is an organizational entity with its own identity, structure, governance body, budget, staff, facilities, and programs located in one community. It is funded by its member school districts and by the vocational aids it receives from the state. Its policies, budget, and procedures are developed by member district representatives and approved by member district boards. A vocational director is in charge of the center and functions as a school superintendent in the capacity of executive officer of the governing board and as a school principal with respect to supervision of the center teaching staff and programs.

The center's administrative structure with a vocational director, who is responsible and accountable for center and program supervision, coordination, development, and evaluation, provides for continuity of leadership. Although there is some ambiguity about the power and authority of the vocational director in relation to school district administrators, there is no ambiguity about who is responsible for running and developing the center. Consequently, the structure provides the opportunity for the development of strong programs and for initiating changes in curriculum and other center functions as needed. The central location made administrative functioning more efficient but made communication with the school districts more difficult.

Centralized center facilities may include or be located in more than one building and may be located in one of the member district's school buildings, but all center facilities are located in one community. Facilities may be either owned or rented by the member school districts. The inflexibility of stationary facilities was reduced in the Interdistrict Center by incorporating movable walls in the newly constructed building.

Using member school enrollments as a basis for assessing member school districts for center costs results in the larger schools paying a larger share of center costs. Usage of the center as a basis for assessing school districts results in those districts who have the most students enrolled in the center paying more. The larger districts may have the most students enrolled (they would have the largest potential enrollment) but, since larger districts also typically offer a larger range of curricular choices, they may have fewer students (or at least a smaller proportion of their total student body) enrolled in the center than the smaller member districts. A combined financing basis, (i.e., assessing both the potential and the actual use of the center) is likely to be a better approach to center financing than either approach would be alone. This is because the center can count on a certain base level of funding, and, at the same time, accommodate fluctuating marginal

BEST COPY AVAILABLE

costs associated with changing rates of center usage. A school that uses the center more pays more which is likely to be an agreeable approach from the viewpoint of school districts.

A lease/own approach to facility acquisition, like that used in the Interdistrict Center is likely to reduce the initial capital investment required to buy or build new facilities and, at the same time, build equity. The policy of not refunding a district for its capital investment if it leaves the center is likely to discourage participation of districts without strong commitment to the center concept and withdrawal of participating districts.

The acquisition of a facility specifically for the center is a distinct advantage of the centralized center. Since a large facility is needed to house several programs, facilities are unlikely to be available in existing school structures and are more likely to require additional space. Newly acquired facilities tend to be arranged and equipped to meet specific program needs and standards. The particular facility in this case devoted a relatively small proportion of center space to administration--a potentially positive characteristic for school districts who are paying the bills.

Scheduling that places center offerings in the middle of the day is likely to be more disruptive to students' and member school districts' schedules. Using part of the lunch hour for transportation time is one way of reducing this disruption and gaining the advantage that early morning or late afternoon scheduling has, when before- or after-school time can be used for student transportation to the center. Since it is more efficient to use the center facilities throughout the day, students from the member district located in closest proximity to the center facilities should be scheduled in the middle of the day to the extent possible to minimize distruption of students' schedules.

When the time for transportation both to and from the center must be caryed out of the school day, short travel distances become an important way of reducing schedule conflicts and disruption. Thus, the centralized center with classes scheduled throughout the day, is likely to be better suited to situations where communities are relatively close together than to those where longer travel distances are involved.

The centralized center may have a tendency to find itself with a high proportion of students who have distruptive behavior patterns. Since member districts are only sending and not receiving students, there is little incentive for them to screen students carefully. By limiting center enrollment to eleventh and twelfth graders, some competition with school district programs is reduced and the possibility of requiring school district courses as prerequisites exists.

The student vocational organization is likely to have problems in a center for two reasons. First, student transportation to after-school or evening meetings poses problems. Scheduling meetings during class time would address this reason but not the second reason which is a lack of primary student identification with the center. It would be cumbersome for center student organizations to carry the names of all the member school districts. If the center name is used, it may not have the same meaning or engender the same enthusiasm in students as their own school name, although this factor should be studied.

Because the center is located several miles from member school districts, awareness of the center on the part of teachers, counselors, and community citizens may be minimal or nonexistent. This lack of awareness was evident in the interdistrict situation even among residents of the community where the center was located. If this situation persists, students are unlikely to learn much about the center, be encouraged to enroll, or be prepared for their experience in programs at the center.

Also related to the center's location in a community several miles from the homes of many of its students, is the limited exposure center faculty have to the communities and ways of life of their students outside of class. Even though students from one member district may be taught together (as they were for the most part in the interdistrict Center) and curricula can be adapted to meet unique needs of a particular school district or community, this is unlikely to happen with limited center teacher exposure to the member schools and communities.

In the centralized center, teachers could identify with a definite group; center faculty meetings and less formal encounters between center teachers provided opportunities for interchange about common problems and challenges.

Regarding access, the centralized center did increase the access of students in all member districts to educational programs. The access was limited by the distance students had to travel and by scheduling conflicts that resulted from the time devoted to travel. Depending on the maturity level and independence of students, it may seem easier to some to stay at their own school and take something a little less appealing than to ride a bus to a less familiar place and be in a class with an unfamiliar teacher.

There was no evidence that the usage rate funding caused schools to discourage students from enrolling in center courses. The dual financing formula probably reduced the tendency for this to occur since schools paid a specified amount for a portion of their assessment, no matter how many of their students enrolled in the center.

Although access to center programs was unequal among member school districts because of differences among the districts in proximity to the center, this may have presented less of a problem in this instance than in a situation where there is one district with no transporation requirements. Because all schools had to transport students to the center, and because the school having the closest proximity "filled in the slots" throughout the day and bore the scheduling inconveniences that might have entailed, the unequal access may have presented fewer problems in this particular instance than may be generally true for the centralized center cooperative arrangement. Further, the geographically central location of the center was an advantage regarding access.

In summary, the most important strengths of the centralized center are its provision for leadership, development, and initiatives regarding the center and its specialized facilities and teaching staff. These are significant strengths and are likely to be heavily weighted in any consideration of how to deliver vocational education programs. The most troublesome weaknesses include the necessity for students to travel, particularly in the middle of the school day, and the inequalities of access among the school districts.

Recommendations

The centralized center as a delivery mechanism for vocational education was used fairly extensively across the state of Minnesota as well as in other states during the 1970s. It should continue to be considered for geographic areas involving short travel distances between communities and where school populations are less sparse.

There are few ways to modify the centralized center. The most promising way appears to be the incorporation of technology to reduce the time of students spend traveling and to minimize schedule conflicts, two of the centralized center's greatest problems. Reducing travel to the center to three days a week may enable students to take something else in their home school. The extent to which vocational subjects can be taught by separating lecture, demonstration, and laboratory work and by teaching the lecture and demonstration components by remote communication and video tape, closed circuit television, and microcomputer systems needs to be determined.

Experimentation with one versus two-hour per day programs and with different curricular formats should be undertaken. For example, rotating programs every other year instead of offering all programs every year could be tried and the impact on enrollments, costs, and efficiency recorded.

Alternative funding formulas should be developed and tried and the impact on school districts, center income, and relationships between enrollment and income and payments noted. Financial incentives for school districts to develop centers should be provided by the state for a trial period to determine the importance of incentives in encouraging school districts to develop centers.

BEST COPY AVAILABLE

Finally, the quality and costs of center programs should be investigated and compared with the quality and costs of programs offered through other inter-school district cooperative arrangements. Such investigations should also include context factors since the quality-cost relationships of a particular educational delivery pattern may be closely related to its context.

RESOURCES AND REFERENCES

Minnesota Department of Agriculture, Minnesota Crop and Livestock Reporting Service. Minnesota Agricultural Statistics, 1978, 1979, 1980.

Minnesota Department of Economic Security. Minnesota Employment and Wages by County, 1978.

Minnesota Department of Education. Evaluation Report of the Inter-District Cooperative Center, 1978.

Minnesota Department of Education. School District Profiles. St. Paul: Public Information and Publications Section, Minnesota Department of Education, 1979, 1980, 1981.

U.S. Department of Commerce, Bureau of the Census. 1970 Census of Population, PC(2)-8C, Income of Farm-Related Population, April, 1973.

U.S. Department of Commerce, Bureau of the Census. 1974 Census of Agriculture, Vol. 1, Part 23, Minnesota State and County Data, April, 1977.

U.S. Department of Commerce, Bureau of the Census. 1980 Census of Population, Part 25, PC80-1-B25, General Population Characteristics: Minnesota, August, 1982.

U.S. Department of Commerce, Bureau of the Census. 1980 Census of Population, Part 25, PC80-1-C25, Characteristics of the Population, General Social and Economic Characteristics: Minnesota, August, 1983.

U.S. Department of Commerce, Bureau of the Census. 1970 Census of Population, General Population Characteristics: Minnesota.

BEST COPY AVAILABLE

May, 1986

INFORMATION FOR OBTAINING SINGLE OR MULTIPLE COPIES OF VOLUMES IN THE SERIES, ACCESS TO EDUCATIONAL OPPORTUNITY IN RURAL COMMUNITIES: ALTERNATIVE PATTERNS OF DELIVERING VOCATIONAL EDUCATION IN SPARSELY POPULATED AREAS

Volume 1: Problem, Study Design and Procedures, Findings, Conclusions and Recommendations by Thomas, R. and Peterson, R. (Station Bulletin #AD-SB-2433), 1984.

Volume 2: The Heartland Vocational Center: A Decentralized Center by Thomas, R.; Peterson, R.; Anderson, and M.J. (Station Bulletin #AD-SB-2714), 1985.

Volume 3: The Northwest Multi-District: A Mobile Facilities Center by Peterson, R.; Thomas, R.; and Anderson, M.J. (Station Bulletin #AD-SB-2703), 1985.

Volume 4: The Inter-District Cooperative Center: A Centralized Center by Peterson, R.; Thomas, R.; Anderson, M.J.; and Rabideau, R. (Station Bulletin #AD-SB-2852), 1986.

Volume 5: The Clay-Wayne County Joint Agreement: A Decentralized Noncenter Agreement by Thomas, R.; Peterson, R.; and Rabideau R. (Station Bulletin #AD-SB-2715), 1986.

Volume 6: Not yet available.

To order by mail request by station bulletin number from:

Communication Resources Distribution
Room 3 Coffey Hall
University of Minnesota
1420 Eckles Avenue
St. Paul, MN 55108 Telephone: 612-625-8173

Ten copies are available at the window of Room 3 Coffey Hall on a walk-in basis. Twenty-four hour notice is required for all in person walk-in orders larger than ten copies

COST:

The publications are available at the following cost for the following units and organizations:

Vol. 1	1.50	Vol. 4	1.75
Vol. 2	2.00	Vol. 5	2.00
Vol. 3	1.50		

Experiment Station units, Agricultural Extension staff, University faculty, students and organizations, other state experiment stations and Agricultural Extension staff, Government agencies that work with experiment stations or Agricultural Extension, Minnesota public and private schools.

The publications are available at the following costs per copy for the following units and organizations:

Vol. 1	3.00	Vol. 4	3.50
Vol. 2	4.00	Vol. 5	4.00
Vol. 3	3.00		

Businesses and industry, public and private schools outside of Minnesota, civic and municipal government agencies and groups, and all others.

The University of Minnesota, including the Agricultural Experiment Station, is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, religion, color, sex, national origin, handicap, age or veteran status.